

# Washington HVSA CQI Toolkit

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Washington State - Home Visiting Services Account

**State Fiscal Year 2018 (July 2017- June 2018)**



Washington State Department of  
**Early Learning**

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# Continuous Quality Improvement in Washington State

## Introduction: CQI and the Toolkit

Continuous Quality Improvement (CQI) provides a constructive and adaptable framework to promote quality, innovation, and program reflection in order to improve outcomes for families. This process is fundamentally data driven, but also draws on the expertise and invaluable knowledge of front-line home visiting staff and families. A thoughtfully implemented CQI project has the potential to optimize program outcomes, identify and test innovative approaches, disseminate best practices, and enhance program efficiency and effectiveness. Through exploration of existing data or data captured through new methods, CQI prompts deep reflection of current practice and outcomes – recognizing the value of learning and development. Two important things to remember as you engage in CQI:

- Quality improvement should be framed by the mission statement of the organization
- CQI's focus on learning means not everything will result in improvement and that is okay!

This **CQI Toolkit** is a compilation of resources and tools to support implementation of your CQI plan and help cultivate and strengthen a culture of quality for your home visiting program. There are tools to support planning, root cause analysis\*, project implementation, and measuring change. Building a culture of quality will underscore that data are valued and that your program is committed to improvement and achieving optimal outcomes for parents, children, and staff. Supporting quality through CQI must be a shared vision of both front-line staff and program management.

## Why is CQI Important to Washington?

As a state, Washington is committed to CQI to ensure we provide the best possible services for children and families. CQI moves beyond quality assurance to be prospective and address systems-level challenges and opportunities. The methodology of CQI encourages deep reflection, engages both management and front-line staff, and provides a framework for systems and detailed-level thinking. Improvement is achieved through incremental and targeted changes - even the most daunting challenges can be tackled by dissecting the problem into manageable pieces. Quality improvement provides a space to address the specific context and needs of your population, environment, and program context.

## Local Implementing Agency Project Expectations and Deliverables

*Please refer to your DEL HVSA Contract for more details*

Over the course of the State Fiscal Year (SFY, July 1<sup>st</sup> – June 30<sup>th</sup>) Local Implementing Agencies (LIAs) will complete two CQI projects. These projects will take place during two six-month project periods. *Project Period 1* will occur between July and December; *Project Period 2* will take place between January and June.

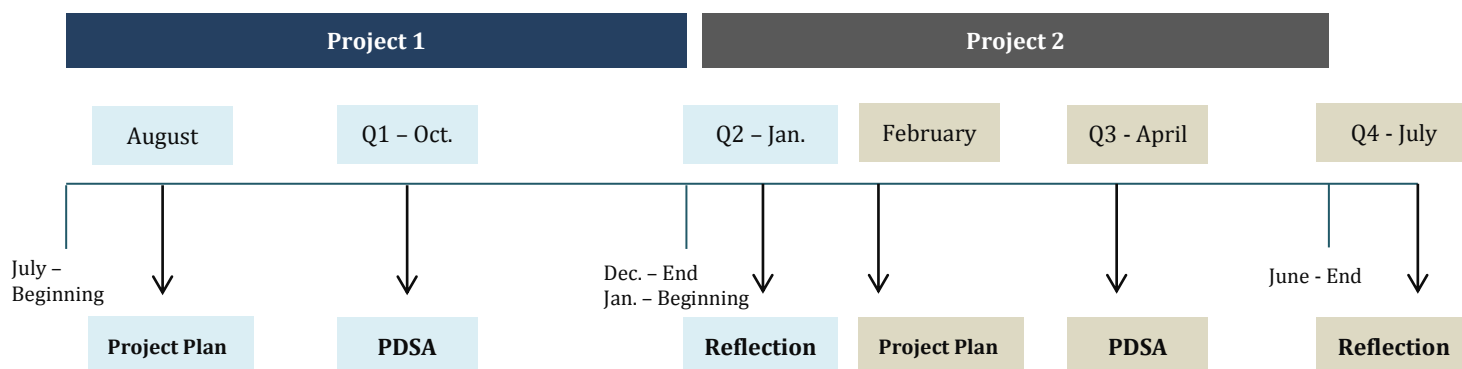
During each project period LIAs will be responsible for submitting three deliverables:

- 1) [Project Charter and Plan](#)
- 2) [Plan, Do, Study, Act \(PDSA\) form](#)
- 3) [Project Summary and Reflection](#)

*These forms are included as appendices in your DEL Contract, as well as in [Appendix A](#). The most up-to-date forms are available on DEL's website: [www.del.wa.gov/homevisiting/programs](http://www.del.wa.gov/homevisiting/programs)*

*\*Root Cause Analysis – Method of problem solving to identify the “root” or source of a problem.*

The timeline below provides a visual of the two CQI projects and corresponding deliverables. (Dates correspond with due dates, for the “Project Reflection” note that the due date falls outside the project time-window – e.g. Project 1 ends in December, but the project reflection is not due until Jan. 30<sup>th</sup> with the Quarter 2 report.)



## CQI Support Tiers

In the coming year, we plan to offer additional opportunities to dive deeper into CQI. In order to meet the diverse needs of the HVSA portfolio (*program size, model, and experience with CQI*) we will offer tiered, or graduated, levels of support. The Universal Tier (as described below) encompasses the basic contract requirements and supports that all programs are accountable for beginning July 2017. The two additional tiers – the Apprentice Tier and Mentor Tier – will offer more frequent and tailored coaching, additional training on use of CQI tools, and face-to-face connections.

Participation in the advanced CQI tiers will require a six-month commitment, as well as enthusiasm and energy to delve further into quality improvement. In addition to greater individualized support, programs who participate will gain a deeper understanding of the science of improvement and sharpen skills in various CQI tools. Through offering additional opportunities for learning, we hope to cultivate increased expertise, leadership, and innovation.

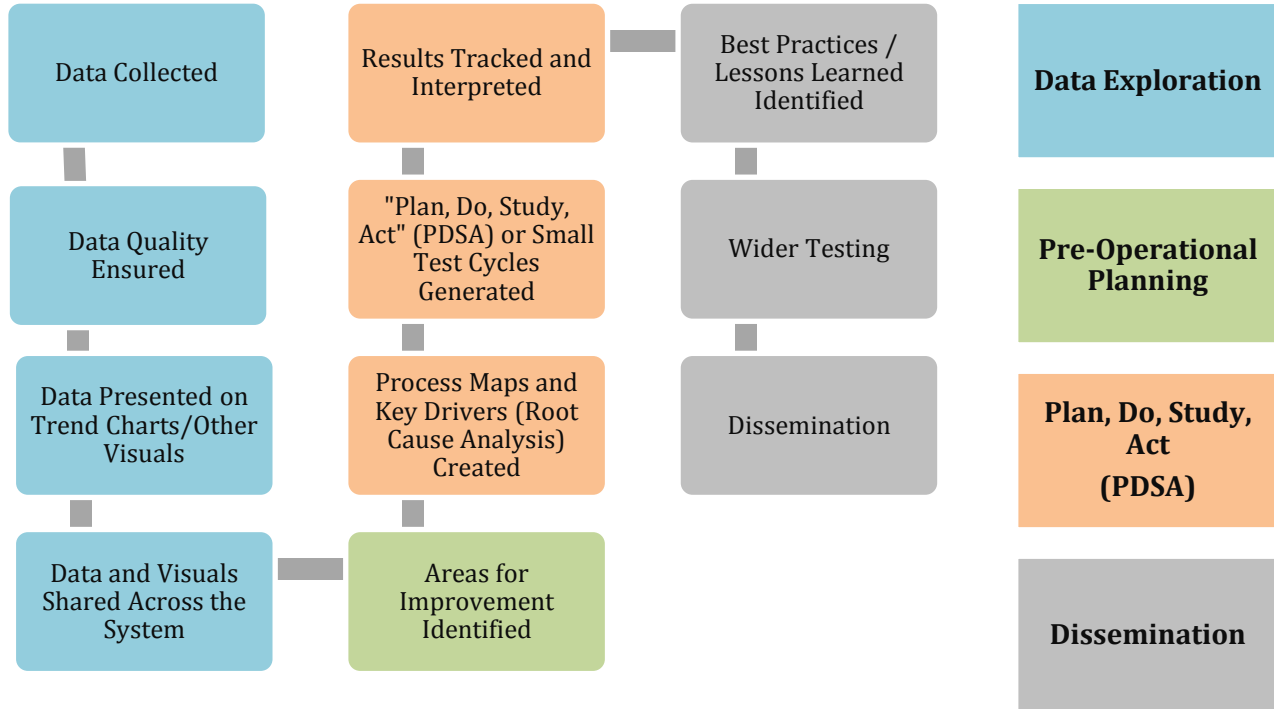
The Universal Tier includes all HVSA programs, as part of completion of basic CQI project requirements. Engagement in either the Apprentice or Mentor tier will be voluntary. In the coming months we will provide additional information regarding the roll-out of the Apprentice Tier, including details about criteria for participation and how to express interest in joining.

Universal Tier – for ALL HVSA Programs (Beginning July 2017)	
– Basic requirements as part of the contract and supports/resources described in this toolkit	
Apprentice (Moderate) Tier – (Est. Beginning January 2018)	
<ul style="list-style-type: none"> <li>– Opportunity to further investigate a specific topic through peer learning</li> <li>– Additional coaching and one-on-one support</li> <li>– Universal Tier + monthly coaching calls, one additional site visit</li> </ul>	
Mentor (Intensive) Tier – (Est. Beginning January 2018 or July 2019)	
<ul style="list-style-type: none"> <li>– 6-month intensive learning opportunity</li> <li>– Tailored support, bi-weekly coaching calls, two site visits</li> <li>– Develop CQI expertise, become a CQI leader in WA</li> </ul>	

# Overview of Continuous Quality Improvement (CQI)

*\*CQI Map developed by Design Options for Home Visiting Evaluation (DOHVE) team*

## Visualizing the CQI Process



## Building and Supporting CQI Teams

*\*Content adapted from training materials developed by DOHVE*

To execute a successful improvement project, you need a dedicated team. Quality Improvement (QI) is fundamentally a team effort, requiring insight and voices from all levels of the program. In order for quality improvement efforts to be successful, there must be a core team of people committed to overseeing and steering the project forward.

CQI teams can vary in size and composition. Teams should include members with different roles and responsibilities, and should reflect diverse experiences and expertise. Smaller home visiting programs may only have a team of two or three, while larger programs may include four or five people on their core QI team. At most, we recommend limiting membership to no more than six individuals to support nimbleness and logistics, like scheduling regular meetings. Regardless of size, it is important to ensure that the right voices are at the table.

### Assembling a team:

- Representation of different levels of the organization/program
- Consider different roles of data specialists, management, home visitors
- Authority/ability to make decisions and test concepts for improvement
- Diversity of experience, knowledge, and expertise

In addition to program supervisors and home visitors, a CQI team may include peripheral partners, including:

- Current and/or graduated parents
- Practitioners or community service providers (individuals with content expertise, i.e. mental health providers)
- Board or advisory committee
- Partners from other programs within the organization

The table below deconstructs various roles and responsibilities of QI team members. One person may fill multiple roles; other responsibilities may be shared by more than one team member.

Typical QI Team Member Roles	
<b>Sponsor (Champion)</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Provides authority to dedicate time to CQI efforts (i.e. program manager or director)</li> <li>– Provides the boundaries of authority for the CQI team</li> <li>– Provides a mechanism for support outside the authority of the CQI team</li> <li>– Supports partnership building outside the agency or between divisions within the agency</li> </ul>
<b>Leader</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Provide opening remarks and introductions to the meeting</li> <li>– Support and reinforce the team for productivity and idea generation (encouragement/coaching)</li> <li>– Ensure that issues are well understood</li> <li>– Communicate team efforts and accomplishments to outside parties</li> <li>– Ensure successes are noted and celebrated</li> <li>– Orients the next <i>Leader</i> at the end of the project</li> </ul>
<b>Facilitator</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Prepares the meeting agenda</li> <li>– Introduces the meeting agenda to the group with the time parameters</li> <li>– Pays close attention to the time limits on the meeting</li> <li>– Draws out opinions of quiet team members</li> <li>– Keeps team members focused on the task</li> <li>– Ensures meeting objectives are met</li> <li>– Scribe summarizes the next steps as agreed upon by the team</li> <li>– Trains the next <i>Facilitator</i> at the end of the project</li> </ul>
<b>Meeting Scribe</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Takes legible notes at each meeting and shares notes with all team members</li> <li>– Updates the Team Charter/Plan as necessary and shares with all team members</li> <li>– Orients the next <i>Scribe</i> at the end of the project</li> </ul>
<b>Data/Information Liaison</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Gathers data/information for the project through a variety of mediums (emails, surveys, interviews, focus groups, etc.)</li> <li>– Works with team to construct data/information gathering instruments</li> <li>– Collates and shares already existing data for the project (from databases)</li> <li>– Ensures data are compiled and provided to the team on a regular basis</li> </ul>
<b>Document Manager</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Maintains team documents and records in an organized and accessible fashion</li> <li>– Ensures all team documents are kept up-to-date</li> <li>– Ensures the story of the team's project is captured and documented</li> </ul>
<b>Meeting Scheduler</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Sends out meeting schedule and reminders to team members</li> <li>– Ensures the team has a space that is appropriate to meet</li> <li>– Works with Facilitator and copies any materials that team members need for the meeting</li> </ul>
<b>Subject Matter Resource</b>	
<i>Tasks:</i>	<ul style="list-style-type: none"> <li>– Provides needed subject matter resources to the team (latest research and practices, instruments, etc.)</li> <li>– Helps translate best practices from research to implementation</li> </ul>

## Creating a Culture of Quality

*\*Adapted from DOHVE training materials*

Creating a “culture of quality”, or a “culture of change”, is foundational to successful quality improvement work. The key components highlighted below demonstrate the critical role that culture plays in supporting CQI efforts.

**Key Components:** *All six components work in partnership to reinforce a culture of quality*

- Generate commitment and interest at all levels
- Understanding the “System”
- Data collected are relevant and meaningful
- Fully utilize data to monitor progress toward goals
- Small-scale tests of interventions to generate learning/understanding

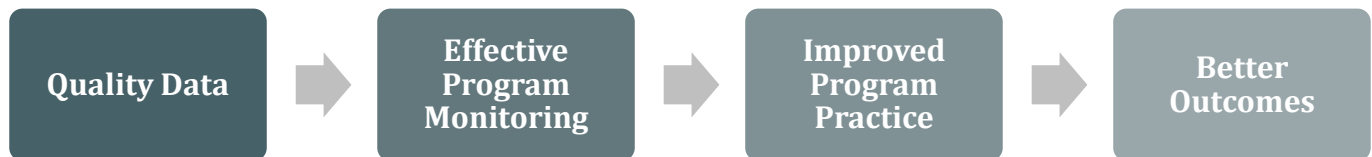
Culture of Quality Framework	
<b>Attitude</b>	<ul style="list-style-type: none"> <li>– Input and buy-in from everyone at every level</li> <li>– Commitment to reach ambitious targets</li> <li>– Recognizes QI as a learning experience</li> <li>– Failure isn’t feared, but learned from</li> <li>– Belief that QI is important to our work</li> </ul>
<b>Transparency</b>	<ul style="list-style-type: none"> <li>– Practices and methods are shared</li> <li>– Results and outcomes are shared (internally and with external partners, i.e. other Home Visiting programs)</li> <li>– Individual contributions to the big picture are recognized</li> <li>– Open communication and critical scrutiny are welcomed and respected</li> </ul>
<b>Data</b>	<ul style="list-style-type: none"> <li>– Data collection infrastructure exists</li> <li>– Protocols in place for data collection and entry</li> <li>– Data entry is accurate and complete</li> <li>– Data (variables) collected are relevant, accurate, and meaningful</li> <li>– Data reports demonstrate change over time</li> <li>– Data reports can be broken into smaller units (i.e. by home visitor, by client, time window)</li> </ul>
<b>Organizational Commitment</b>	<ul style="list-style-type: none"> <li>– All organizational members are committed (at all levels)</li> <li>– Members of QI team are knowledgeable and informed</li> <li>– Frontline practitioners (home visitors) are supported by administrative leadership</li> <li>– Improvement efforts are guided by team approach and accountability</li> <li>– Data are readily accessible</li> <li>– Curiosity and innovation are encouraged</li> </ul>
<b>Understanding the Current Culture</b>	<ul style="list-style-type: none"> <li>– Mission, vision, and values supports culture</li> <li>– Determination of where we are today vs. where we want to be</li> <li>– Consistent and frequent methods of communication with team</li> <li>– Lines of accountability</li> <li>– Expectations for performance</li> <li>– Processes and procedures</li> </ul>
<b>Focused on Outcomes</b>	<ul style="list-style-type: none"> <li>– Outcomes are clearly articulated and understood</li> <li>– Outcomes are measured against an established target/goal</li> <li>– All process measures are tied to outcomes</li> <li>– Deep understanding of systems, process, and procedures</li> <li>– Performance is analyzed and shared frequently</li> </ul>



## Quality Assurance versus Quality Improvement

Quality assurance (QA) is an essential building block for quality improvement (QI). QA is necessary to ensure essential standards are met and also vital to day-to-day operations and program maintenance. However, QA is largely a retrospective process, reflecting on data from a fixed point in time. In contrast, QI allows us to consider the past and prospectively set aims for the future. QI provides a framework for systems-oriented change, rather than focusing simply on compliance.

These two forces, QA and QI, work hand-in-hand to support better outcomes. Given that QI is a data-driven process, efforts to ensure data quality are essential. Without complete and accurate data, we have limited information to engage in effective QI. Likewise, QI does not replace QA, but focuses on addressing barriers to high quality service delivery.



Quality Assurance	Quality Improvement
<ul style="list-style-type: none"> <li>✓ <b>Reactive and retrospective</b> – usually focuses on a single point in time</li> <li>✓ <b>Compliance</b> – ensuring accuracy and consistency of data collection, procedures, practices</li> <li>✓ <b>Data quality</b> – focused on the quality and accuracy of the data collected, rather than on what the data conveys</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Retrospective and prospective</b> – learning from where we’ve been, looking ahead to where we want to go</li> <li>✓ <b>Data driven</b> - relies on quality data to identify problems and accurately assess and measure outcomes over time</li> <li>✓ <b>Systems oriented</b> – looks for ways to improve the effectiveness of the system; encourages learning by testing changes on a small scale</li> <li>✓ <b>Culture of quality</b> – improvement is the responsibility of all; ideas for change can come from every level</li> <li>✓ <b>Client focused</b> – desire to improve outcomes for families</li> </ul>
<b>Examples:</b> <ul style="list-style-type: none"> <li>• Completion of data collection</li> <li>• Accuracy of data entry</li> <li>• Compliance with existing procedures/protocols/reporting requirements</li> </ul>	<b>Examples:</b> <ul style="list-style-type: none"> <li>• Increase percentage of families who receive expected number of home visits</li> <li>• Increase completion rate of referrals for caregivers experiencing depression</li> <li>• Increase the percentage of infants who are breastfed beyond 3 months (or 6 months)</li> </ul>
<b>Why is this important for Home Visiting?</b> <ul style="list-style-type: none"> <li>• Helps ensure and support compliance with reporting/model requirements</li> <li>• Establishes procedures and program standards</li> <li>• Creates an accurate picture of current practice</li> <li>• Important building block for <b>Quality Improvement</b></li> </ul>	<b>Why is this important for Home Visiting?</b> <ul style="list-style-type: none"> <li>• Improve quality of services</li> <li>• Identify and disseminate best practices and lessons learned</li> <li>• Connect data to practice</li> <li>• Draw on expertise at all organizational levels</li> <li>• Optimize outcomes</li> <li>• <b>Add greater value for families</b></li> </ul>

## CQI Topic Options

For the coming program year, Washington State has chosen four content areas to focus CQI efforts. There were many relevant topics to choose from, but these four were selected for their relevance to practice and the HVSA aligned measures, previous interest/efforts expressed by LIAs, and pertinence to other CQI efforts happening nationally.

- Caregiver Depression Screening & Referral
- Intimate Partner Violence (IPV) Screening & Referral
- Parent-Child Interaction
- Family Engagement

Each of these practice areas are vast and encompass a number of specific practice areas. Given the range of topics, we hope each HVSA program will easily identify a CQI topic and project that is meaningful and relevant for their team. The topic chosen should also allow you to focus on the unique challenges associated with serving your particular community through your Home Visiting model. Choice of a pertinent topic and recognition of how QI efforts support your key program goals will encourage active team engagement in the CQI process.

### Rationale for chosen 2017/18 CQI topics:

#### Caregiver Depression

It is vital that caregivers suffering from depression receive access to appropriate resources. Mental health support is critically important for both the parent and the child. Abundant research has demonstrated that caregiver depression increases risk of childhood abuse and neglect, and may impact the ability of parents to tune in to the most basic cues and needs of an infant or young child. Pivotal small moments during these early years serve as building blocks for reciprocal, trust-building patterns of interaction - setting the stage for healthy social emotional, cognitive, and language development. We want caregivers, as well as infants and young children, to benefit from an attuned relationship throughout this precious window of time.

We know that families come to home visiting services with a vast array of experiences, including trauma, extreme poverty, and personal and/or cultural beliefs about mental health. As such, depression can be a difficult topic to ever fully feel comfortable discussing. Additionally, limited availability of accessible, culturally relevant resources further highlights the complexity of connecting families to the supports they need. Given the sensitivity and complexity of this issue, there is ample room for innovation and shared learning to improve the practice of caregiver depression screening and referral.

#### Baseline Data from 2016 (MIECHV only) -

Maternal Depression Screening: 84.4%

See Appendix B for [Caregiver Depression](#) Key Driver Diagram KDD

#### Intimate Partner Violence

The Washington State Coalition against Domestic Violence (WSCADV) defines domestic violence as “a pattern of behavior that one person in a relationship uses to gain power and control over the other. Abuse is not caused by anger, mental problems, alcohol or other drugs, or other common excuses. It is caused by one person’s belief that they have the right to control their partner. Anyone can be a victim.” Home visiting research reveals that within our programs, caregivers may be experiencing some level of abusive treatment within their partner relationship.

It is of utmost importance that victims receive appropriate and preferred support for their own wellbeing. But similar to depression, these resource connections are particularly vital due to the direct impact a violent/abusive environment has on a child’s early experiences and development. Intimate partner violence (IPV) is a deeply complex topic, further complicated by individual family experiences, home visitor comfort, and the potential for

life-threatening situations. Strengthening the practice of identifying and connecting families with support, requires persistent reflection and understanding of family and home visitor dynamics.

**Baseline Data from 2016 (MIECHV only) –**

IPV Screening: 84.1%

IPV Referrals: 36.5%

IPV Safety Plans (retired MIECHV measurement): 70.4%

*See Appendix B for [Intimate Partner Violence](#) Key Driver Diagram*

**Parent-Child Interaction**

Fundamental to our approach in home visiting is the belief that parents are their child's first and most important teacher. Optimal child development is supported through positive interactions between a parent and his/her child. While this focus is central to the home visiting approach, actual practice for supporting parent-child interactions can vary widely. Home visiting programs may also diverge in how they utilize parent-child interaction assessment tools, such as the HOME Inventory. These tools can be used to prompt dialogue, regularly assess the quality of parent-child interactions, and incorporate learnings from the assessment tool into service planning for families.

We know home visiting programs vary in their comfort and experience with the parent-child interaction assessment tools. We feel that there is a great opportunity to strengthen practice through the use of these tools, as well as examine how the broader programmatic foundation works to support parent-child relationships, one of the most foundational aspects of our work. For the *Parent-Child Interaction* topic you may utilize the HOME or other validated Parent-Child Assessment Tool to guide your CQI project.

Baseline Data from 2016 (MIECHV only) – HOME Assessment Completed: 74.4%

*See Appendix B for [Parent-Child Interaction](#) Key Driver Diagram KDD*

**Family Engagement**

Our ability to effectively engage in and develop trusting relationships is central to our capacity to provide meaningful resources, information, and supports through all areas practice. Opportunities to support effective family engagement exist at many points throughout home visiting programming:

- Effective outreach and referral pathways
- Family orientation to program commitment and goals
- Opportunity for families to truly determine fit of program in meeting their own needs
- Co-creation of visit timing and planning with families
- Engaging families in parent education and group supports
- Tending to factors of retention and planned transitions

This list is just the beginning! As a program, we know that the quality of family engagement is an area of continual and meaningful reflection. We are committed to creating a space for programs to test innovative approaches and learn from one another to discover effective methods of family engagement. As our community of families is forever changing, there is a never-ending need for learning.

Baseline Data from 2016 (MIECHV only) –

Enrollment (avg. number of families to avg. number of slots per program): 80%

Client Engagement (families enrolled who received at least one home visit per month – on avg.): 83%

*See Appendix B for [Family Engagement](#) Key Driver Diagram KDD*

## State CQI SMART Aims:

The State **SMART aims**\* described below are intended to guide our collective efforts as a state. These goals are broad and overarching – they are not intended to be used as site-level aims. Rather, these goals will serve as a benchmark to understand how individual efforts of each program contribute to State-wide progress.

State-Level SMART Aims
<b>Caregiver Depression</b>
By June 30th 2018 (end of SFY), <b>90%</b> of HVSA clients screened for Caregiver Depression, 85% of positive screens offered a referral and <b>50%</b> access services.
<b>Intimate Partner Violence</b>
By June 30 <sup>th</sup> 2018 (end of SFY), <b>90%</b> of HVSA clients screened for Intimate Partner Violence and <b>85%</b> of positive screens offered a referral.
<b>Parent/Child Interaction</b>
By June 30 <sup>th</sup> 2018 (end of SFY) <b>85%</b> of parents screened for Parent-Child Interaction using a validated Parent-Child Interaction assessment tool
<b>Family Engagement</b>
By June 30th 2018 (end of SFY), <b>70%</b> of families receive the expected number of home visits (as defined by model standards).

\***SMART Aims** – Goals that are “Specific, Measurable, Achievable, Relevant, Time-bound”

Additional Topic Resources
<b>Caregiver Depression</b>
<b>Depression Screening (PHQ-9) Training Webinar:</b> <a href="https://del.wa.gov/homevisiting/programs">https://del.wa.gov/homevisiting/programs</a>
<b>Perinatal Support Washington:</b> <a href="http://perinatalsupport.org/">http://perinatalsupport.org/</a> Support Groups: <a href="http://perinatalsupport.org/for-parents/supportgroups/">http://perinatalsupport.org/for-parents/supportgroups/</a> Brochures/handouts for families: <a href="http://perinatalsupport.org/brochures-for-families/">http://perinatalsupport.org/brochures-for-families/</a>
<b>HV CoIN, Tools and Resources for Maternal Depression:</b> <a href="http://hv-coiin.edc.org/taxonomy/term/59">http://hv-coiin.edc.org/taxonomy/term/59</a>
<b>IPV</b>
<b>Washington State Coalition Against Domestic Violence (WSCADV):</b> <a href="https://wscadv.org/">https://wscadv.org/</a> Safety Planning Policies and Protocol: <a href="https://wscadv.org/wp-content/uploads/2015/06/DVHF-Toolkit-Safety-Planning-Policy-and-Protocol.pdf">https://wscadv.org/wp-content/uploads/2015/06/DVHF-Toolkit-Safety-Planning-Policy-and-Protocol.pdf</a> Domestic Violence Programs by County: <a href="https://wscadv.org/washington-domestic-violence-programs/">https://wscadv.org/washington-domestic-violence-programs/</a> Resource Library: <a href="https://wscadv.org/resources/">https://wscadv.org/resources/</a>
<b>Futures Without Violence:</b> <a href="https://www.futureswithoutviolence.org/">https://www.futureswithoutviolence.org/</a> Free Downloads (including Safety Cards): <a href="#">Futures Free Downloads</a>
<b>Parent-Child Interaction</b>
<b>Center on the Social and Emotional Foundations of Early Learning:</b> <a href="http://csefel.vanderbilt.edu/resources/family.html">http://csefel.vanderbilt.edu/resources/family.html</a>
<b>Love, Talk, Play:</b> <a href="http://lovetalkplay.org/why-love-talk-and-play/">http://lovetalkplay.org/why-love-talk-and-play/</a>
<b>Family Engagement</b>
<b>HV CoIN, Tools and Resources for Family Engagement:</b> <a href="http://hv-coiin.edc.org/taxonomy/term/84">http://hv-coiin.edc.org/taxonomy/term/84</a>
<b>For NFP – Client Engagement Tools available through the NFP Community website</b>

## CQI Tools – Templates and Instructions

The following section is a toolbox of different CQI tools and corresponding templates to support your improvement projects. You may find that certain tools fit better with your learning style or how you process data and information. Other tools may be appropriate for different parts of the quality improvement process.

These tools are intended to be a resource. You are not required to use any particular tool, but we encourage you to test out different tools to better understand how they can enrich and guide your project. This is not an exhaustive list of every CQI tool available, but these are some of the most common and widely used CQI tools.

We have grouped CQI tools into four categories: planning, root cause analysis, implementation, and measurement. These tools will help you design, launch, manage, and evaluate a successful improvement project.

CQI Tools	
<b>Planning</b>	
SMART Aim	Identify and define your goal
Establishing Measures	How will you measure progress?
Process Mapping	Create a visual diagram of the process in which you are intervening
Affinity Diagram	Brainstorm and categorize important ideas
Change Concepts and Ideas	Identifying interventions or innovations to test
<b>Root Cause Analysis</b>	
Pareto Chart/Diagram	Determine which factors have the most impact, and where to focus your efforts
Fishbone Diagram	Visualize the root causes to accurately diagnose the problem, rather than focus on the symptoms or its history
5 Whys	A simple problem-solving technique to get to the source or “root” of the problem quickly
<b>Implementation</b>	
Key Driver Diagrams	A visual display of what “drives,” or contributes to, the achievement of a project aim – defines your “theory of change”
PDSA	The primary vehicle for CQI - shorthand for testing a change — by planning it, trying it, observing the results, and acting on what is learned
<b>Measurement</b>	
Run Charts	A visual study of data over time to understand progress – detect trends or patterns
Recognizing Change	Three simple rules to decipher if the data represents a random pattern or non-random pattern (indicating change)

# Planning - *SMART Aims*

*\*Adapted from DOHVE and "Model for Improvement" by Associates in Process Improvement (API)*

**SMART Aims** serve as your primary benchmark for measuring the success/failure of change interventions. Without a clear goal and clearly defined measurement, it is difficult to determine impact of all your improvement efforts. A well-developed aim provides a clear target that will serve to guide your CQI project.

By \_\_\_\_\_, \_\_\_\_\_ of \_\_\_\_\_ will \_\_\_\_\_  
(When) (#, %, or % Change) (Who) (What result, change, benefit?)

## Who, What, Where, When, Which, Why?

**S** – Specific  
**M** – Measurable  
**A** – Achievable  
**R** – Relevant  
**T** – Time bound

Example of a **SMART** Goal: By December 30, 2017, 70% of clients experiencing violence will have a safety plan, increased from 50%.

### Specific:

- State exactly what you want to accomplish
- Who, What, Where, When, Which, Why?

### Measurable:

- How can it be measured?
- How is it operationalized?
- Does your measurement allow you to see progress?
- How can perceptions be measured (i.e. surveys)?

### Achievable:

- Your aim should be a stretch/challenge, but also attainable
- Can home visitors impact this goal?
- Is it changeable? If it doesn't seem changeable, why not?
- Is there evidence in home visiting for this goal?

### Relevant:

- How does the goal tie into your practice?
- Is it aligned to your broader objectives (program, organization, model, etc.)?

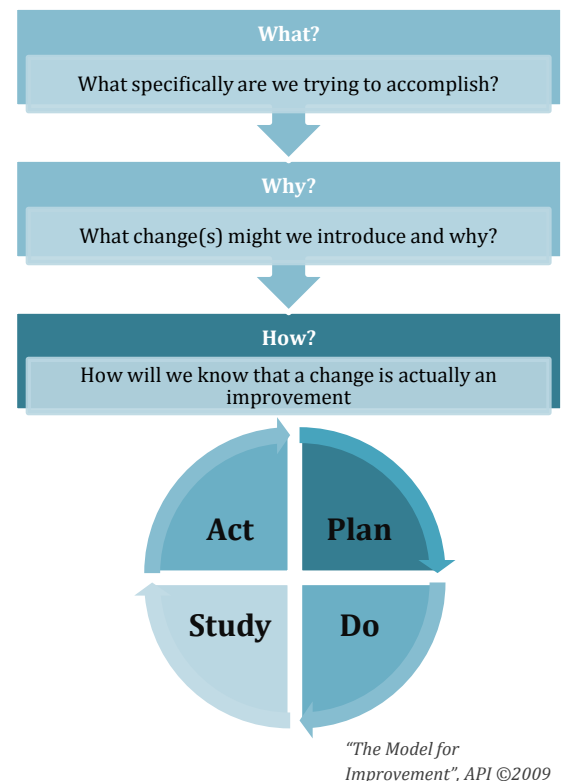
### Time-bound:

- As specific as possible, realistic and attainable

Example of a goal that is **not** SMART: "We will improve safety for all of our clients."

Why isn't this SMART?

- Very broad, not specific
- It is not measurable
- Not actionable
- Generally relevant, but it is too generic to be relevant to specific process improvement goals
- It is not time bound, so we don't know when to measure this nor when to expect it can be achieved



# Planning – *Establishing Measures*

*\*Adapted from Institute for Health Improvement (IHI) [Establishing Measures](#)*

Measurement is a critical part of testing and implementing changes. Measures indicate whether changes are actually leading to improvement. Relevant and appropriate measures are like guideposts for your project.

**Three Types of Measures:** Use a balanced set of measures for all improvement efforts: outcomes measures, process measures, and balancing measures.

**Outcome Measures:** How does the system impact the values of patients, their health and wellbeing? What are impacts on other stakeholders such as payers, employees, or the community?

- Depression: % of clients screened positive for depression who access services
- IPV: % of clients screened positive for IPV who are provided with referrals/complete safety plans
- Parent-child interaction: % of parents demonstrating positive parenting behaviors
- Family engagement: % of families receiving recommended # of visits (by model standards)

**Process Measures:** Process measures demonstrate how different factors (or “drivers”) that support your SMART aim are working. Are the parts/steps in the system performing as planned? Are we on track in our efforts to improve the system? Examples:

- Depression: % of clients screened positive for depression who were referred for services
- IPV: % of clients who were screened for IPV on time (within 6 months of enrollment)
- Parent-child interaction: % of clients who have received a Parent-Child Interaction assessment during the report year (i.e. HOME Inventory)
- Family engagement: % of referrals received last month resulting in enrollment

**Balancing Measures (looking at a system from different angles/dimensions):** Are changes designed to improve one part of the system causing new problems or fluctuations in other parts of the system?

*Balancing measures can be tricky to track in a short period of time, so this is less important for the duration of our CQI projects. It may be helpful to do a pulse-check with staff to see how efforts toward improvement may be impacting other aspects of their work.*

## Example measures for Washington State CQI Topics:

<b>Caregiver Depression</b>	<ul style="list-style-type: none"><li>– % of clients screened for depression, using a validated tool (PHQ-9), within 90 days of enrollment or delivery (if enrolled prenatally)</li><li>– % of clients who screen positive for depression who are referred to appropriate mental health services</li></ul>
<b>IPV</b>	<ul style="list-style-type: none"><li>– % of clients screened for IPV, using a validated tool (Futures), within 6 months of enrollment</li><li>– % of clients who screen positive for IPV who are referred to domestic violence services</li><li>– % of clients who screen positive for IPV who have a safety plan</li></ul>
<b>Parent/Child Interaction</b>	<ul style="list-style-type: none"><li>– % of clients who have participated in a Parent/Child Interaction assessment (using a validated tool)</li><li>– % of home visits where parent-child interaction is incorporated in visit plan</li></ul>
<b>Family Engagement</b>	<ul style="list-style-type: none"><li>– % of families receiving recommended # of visits (by model standards)</li><li>– % of families that received all of the expected home visits this month</li><li>– % of families contacted who received a first face-to-face contact within 14 days</li><li>– Average number of families attending group connections</li></ul>



# Planning - Process Mapping

\*Adapted from DOHVE Presentation and Institute for Health Improvement (IHI) [Flow Chart Tool](#)

Using a **Process Map/Flow Chart** has a variety of benefits:

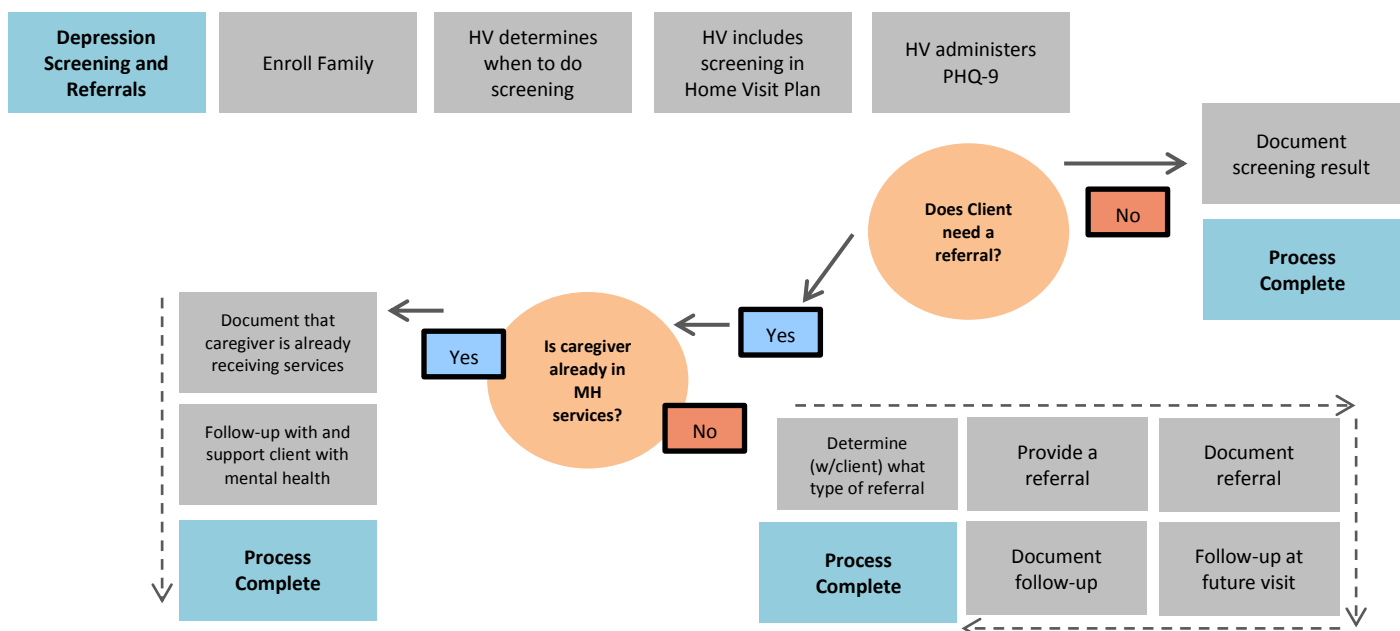
**Purpose:** Provides a visual diagram or picture of the sequence of steps to complete a task; depicts the process where the current problem exists.

- It **identifies steps** that do not add value to the internal or external customer (staff, clients, etc.)
- It serves as a basis for designing new processes and **generating change ideas**
- **Team Learning:** Helps team members gain a shared understanding of the process and use this knowledge to collect data, identify problems, focus discussions, and identify resources
- **Training Aid:** Assists in communicating to others how a process is completed

## Preparing to Process Map:

- Assemble your CQI Team - Get the “right” people in the room - those who know the process best
- Determine which process needs to be documented
- Decide on the level of detail - *big picture or nitty-gritty details?*
- Agree on where the process begins and ends - Define the first and last steps in the process (*by observing, brainstorming, or consulting with the people responsible for each step*)
- Begin documenting the process steps in sequence
  - Note that some steps occur simultaneously. Describe the process as it really exists, not the ideal. Include what happens when there are problems/hic-ups in the process. (*Tip: “post-it” notes are a flexible way to document steps, using one note for each step. This allows you to easily change the order or add new steps*)
- At decision symbols, choose the most natural branch and continue to the end
- Identify additional staff to review or provide input on your process map
- Read through the flowchart to check for accuracy and completeness
- Review the process map to identify key questions and elements of the process that can be strengthened or altered
- When the flowchart is complete and accurate, **analyze it, use it, and keep it up-to-date**

Example of Caregiver Depression and Referral Process:





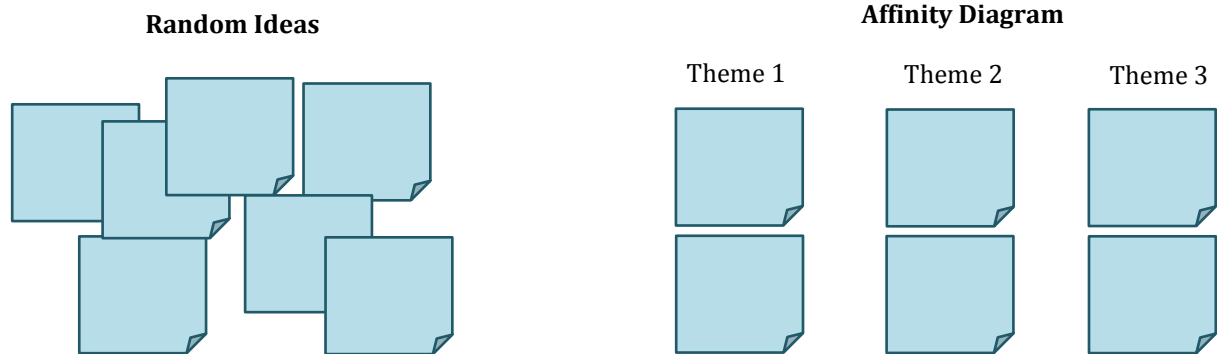
# Planning – Affinity Diagram

*\*Adapted from Minnesota Department of Health, [Public Health & QI Toolbox](#)*

## What is an Affinity Diagram?

An affinity diagram is a method of brainstorming, taking what might seem like random ideas or suggestions and eventually organizing these ideas into natural groupings. This tool helps to organize a large volume of ideas that might otherwise seem overwhelming. An affinity diagram also allows a group to **make connections between ideas**, or see recurring themes, in ways that might not seem obvious at first.

Affinity diagrams can also serve to help a group reach agreement by organizing ideas into clearer, easy-to-understand themes. Each member of a team or group should contribute ideas to the best of their knowledge, even if they don't know or understand the full scope of the problem.



## How to create an Affinity Diagram:

1. **Define the Problem:** Start by drafting a problem statement. Write the issue down, and post it where everyone can see it and refer back to it throughout the exercise.
2. **Brainstorm Ideas:** As a group, begin to generate ideas. Ensure that all voices are heard. Document ideas shared on sticky-notes or on paper. Do not start grouping ideas yet (*this will be tempting, as natural groups start to emerge*). At this point, your team should feel free to state any and all ideas, piggyback off of each other's ideas, and refrain from judgement at this point, be open to all ideas.

Record ideas on sticky-notes, and post them underneath the problem statement.

3. **Group Ideas:** Without talking, begin to group ideas. (*Grouping silently allows team members to avoid influencing or judging ideas*)

When grouping, think about similarities and connections. Some ideas might not fit into a clear group, which is just fine - sometimes, these "lonesome" ideas can be just as important to the process.

4. **Categorize and Reach Consensus:** Discuss as a team: *Do you notice interesting patterns? Things that should be changed/rearranged? Does this reflect what you experience?*

Create headings and place at the top of each like grouping of ideas. It's not unusual to come up with 4-5 main categories, under which ideas are grouped. If you need to, divide big group headings into smaller subheadings for clarity, or place two headings next to each other.

5. **Finalize:** Finalize your diagram and distribute it to team members as appropriate. Make sure your problem statement is included at the top of your finalized diagram, and that headings and subheadings are evident and reflect the group's consensus.

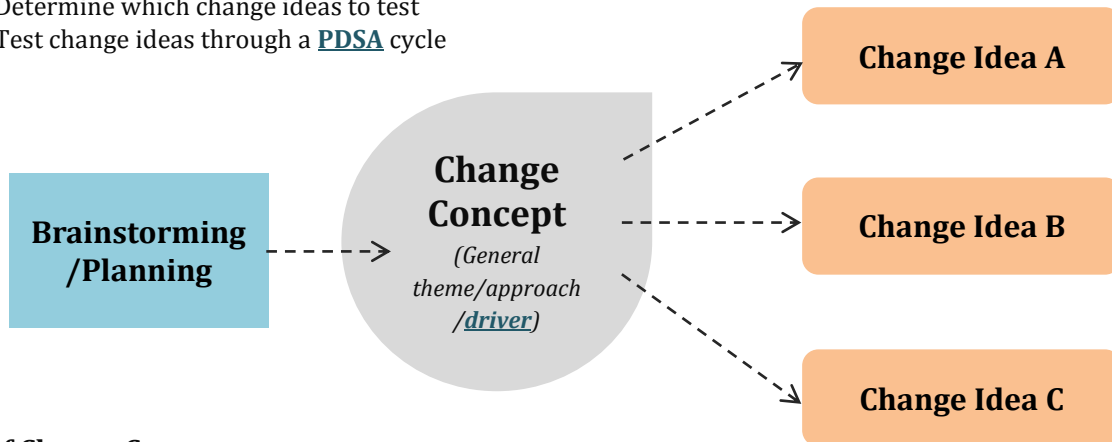
# Planning – *Change Concepts and Ideas*

*\*Adapted from Institute for Healthcare Improvement (IHI), [Using Change Concepts for Improvement](#)*

## What is a Change Concept?

“A **change concept** is a general notion or approach to change that has been found to be useful in developing specific ideas for changes that lead to improvement. Creatively combining these change concepts with knowledge about specific subjects can help generate ideas for tests of change.” – IHI, [Using Change Concepts for Improvement](#)

- Identify change concept to concentrate on
- Utilizing *change concepts* to generate *change ideas*
- Determine which change ideas to test
- Test change ideas through a [PDSA](#) cycle

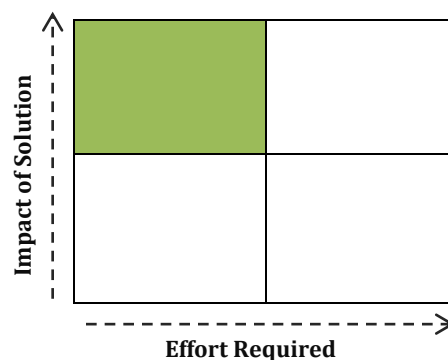


## Examples of Change Concepts:

- Eliminate Waste
- Improve Workflow
- Optimize Inventory (Services)
- Change the Work Environment
- Enhance the producer/customer relationship (home visitor/client, program/partners, supervisor/home visitor, etc.)
- Manage Time
- Manage Variation/Inconsistency
- Design Systems to Avoid Mistakes
- Focus on the Product or Service (quality or quantity)

## Prioritizing Change Ideas:

- **Multi-Voting:** Using [multi-voting](#), give everyone on the team 4-5 votes (use stickers or another tally marker to track votes), total responses, the idea(s) with the most votes move to the top. You may use this as an opportunity to discuss rationale behind what people chose, try to understand everyone's perspective.
- **Pareto Analysis** – As a team use the [Pareto Chart](#) process to analyze and prioritize the most important factors to address – these may each be associated with a particular change idea.
- **Prioritization Matrix** – As a team, develop a set of criteria for prioritizing ideas to test, rank each idea on a scale of 1 – 5 (low – high). As a team analyze and discuss which ideas scored highest against the criteria you selected.
- **Effort-Impact Grid** – An [effort/impact grid](#) evaluates the level of effort required and the estimated impact. The best ideas will fall in the quadrant with the lowest effort, but the highest impact. See below:



# Root Cause – Pareto Chart/Diagram

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*\*Adapted from Minnesota Department of Health [QI Toolbox](#); and materials from the Institute for Healthcare Improvement (IHI)*

## *What is a Pareto Chart?*

### **Based on the Pareto Principle:**

- When several factors affect a situation, a few factors (approximately 20%) will account for most (approximately 80%) of the impact
- Helps narrow efforts to the most significant factors, singling out the vital **few** from the trivial **many**
- Useful tool for setting priorities and determining which causes to focus efforts on first

### ***The Pareto principle: 20% of sources cause 80% of problems***

A Pareto chart/diagram is a type of bar chart in which the various factors that contribute to an overall effect are arranged in order according to the magnitude/weight of their effect.

This ordering helps identify the “vital few” (factors warranting the most attention) from the “trivial many” (factors that, while useful to know about, have a relatively smaller effect). Using a Pareto chart helps teams concentrate efforts on the factors that have the greatest impact. It also helps a team communicate the rationale for focusing on certain areas.

## *How to Construct a Pareto Chart*

### **1. Choose Problem, identify all potential causes**

- As a team, select a problem to analyze.
- Identify potential causes of that problem causes. In order to evaluate/rank the causes you will need to collect some data.

### **2. Choose Measurement Units**

- Choose units of measurement common across all potential causes. For example, if data is collected through a survey the unit of measure would be individual responses (such as program exit reasons). Units of measure could also include frequency of an event, or number of individuals (home visitors or clients).
- Choose a time period long enough to accurately represent the situation. Remember, the interval should take any patterns or seasonality into account.

### **3. Gather Data**

- Gather data on your team's variables, and store in a spreadsheet. Data may be collected from existing data sources or may require new data collection (surveys, observations).

### **4. Construct Pareto Chart**

- Start to draft the Pareto chart (constructed like a [histogram](#)): the chart's horizontal axis contains the problem categories and the vertical axis contains the measurement (frequency, people, etc.).
- Create a table with the problem categories and corresponding frequency. Sort frequency in descending order (greatest to least) to assess which problem causes are occurring in the greatest amount—and therefore have the greatest potential to positively impact your problem if solved or improved.
- Using Excel, you can create a Pareto Chart with a line to detect which categories account for 80% of the problem.
  - [Excel Pareto Chart Tutorial](#) or use the [Pareto Chart Template](#) linked here.

### Example Pareto Chart:

*\*Pareto Chart developed by Montana MIECHV Practicum CQI Team*

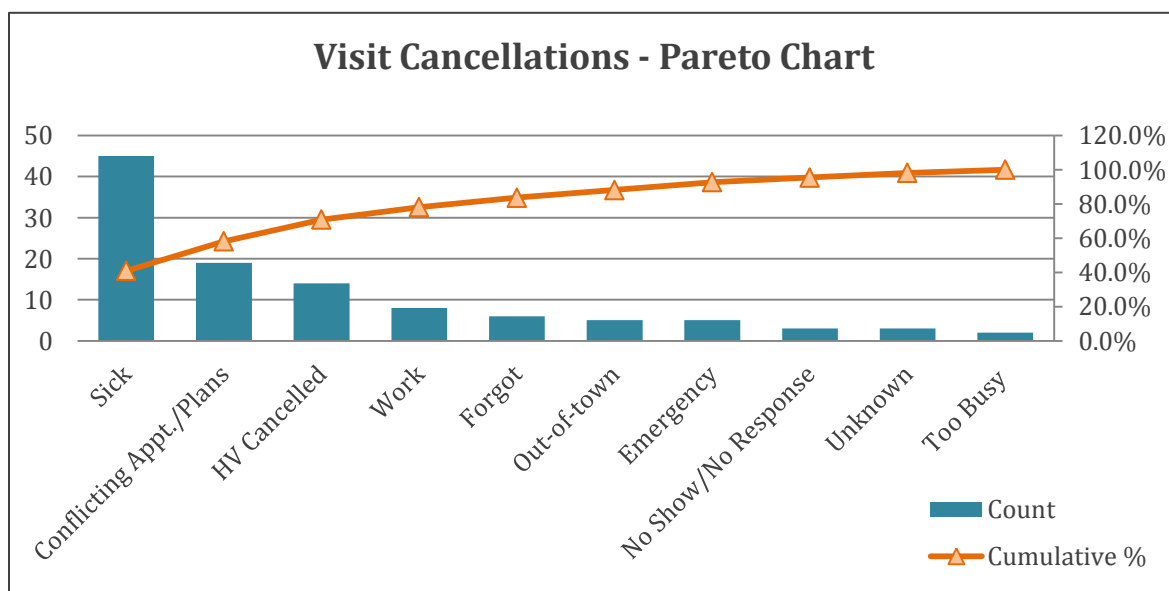
Problem: Frequency of missed home visits

As part of a CQI project to improve family engagement, a Home Visiting program decided they needed to know more about why families were cancelling home visits. The CQI team sat down and identified what they believed were the primary reasons families missed or canceled home visits. Causes identified:

- Client sick
- Conflicting appointments
- HV cancelled
- Work
- Out-of-town
- Forgot
- Emergency
- No show/no response
- Unknown
- Too busy

In order to find out which of these causes were most common, the CQI team worked with the home visiting staff to collect data on the reasons for missed visits. The data demonstrate that that illness, conflicting appointments, cancellation from home visitors, and work schedules account for a significant proportion of canceled visits. With this new perspective, the team can focus on interventions that target these specific reasons for visit cancellations.

Reason Given	Count	Cumulative Count	Cumulative %
Sick	45	45	40.9%
Conflicting Appt./Plans	19	64	58.2%
HV Cancelled	14	78	70.9%
Work	8	86	78.2%
Forgot	6	92	83.6%
Out-of-town	5	97	88.2%
Emergency	5	102	92.7%
No Show/No Response	3	105	95.5%
Unknown	3	108	98.2%
Too Busy	2	110	100.0%



# Root Cause – *Fishbone Diagram*

\*Adapted from Minnesota Department of Health, [Public Health & QI Toolkit](#); and [American Society for Quality \(ASQ\)](#)

## What is a Fishbone Diagram? (Also known as “Cause and Effect Diagram”)

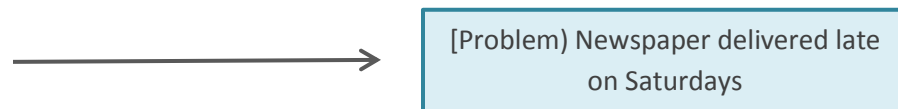
A fishbone diagram helps team members visually chart the root causes of a problem, allowing them to truly diagnose the problem rather than focusing on symptoms. It allows team members to separate a problem's content from its history, and allows for team consensus around the problem and its causes.

### *Directions and Example:*

#### 1. Problem Statement

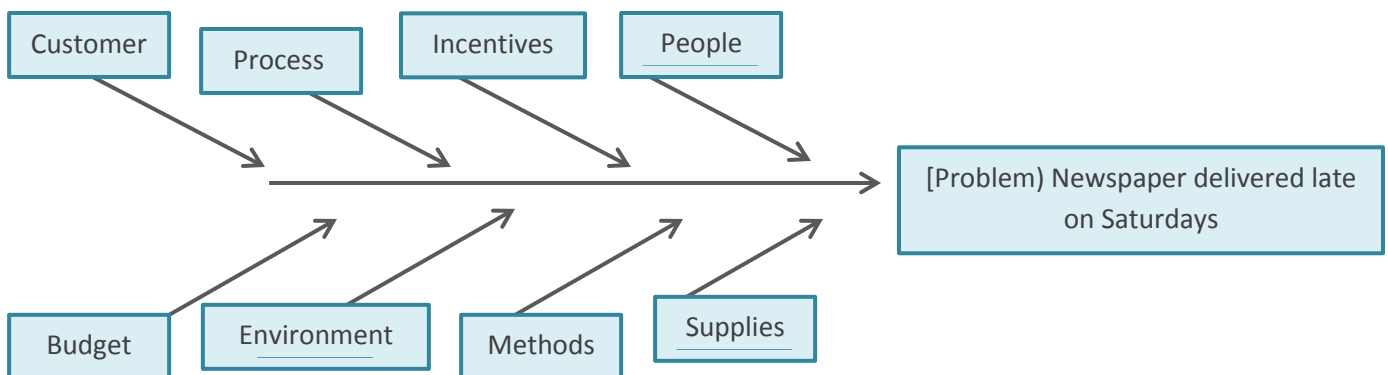
Draft a clear problem statement, on which all team members agree. Be specific about how and when the problem occurs.

Write the problem statement on the right side of your paper, at the head of the “fish.” Your team will work “backwards” from this identified problem. Draw a line with an arrow toward the head of the fish—this is the fish's “backbone.”



#### 2. Categorization

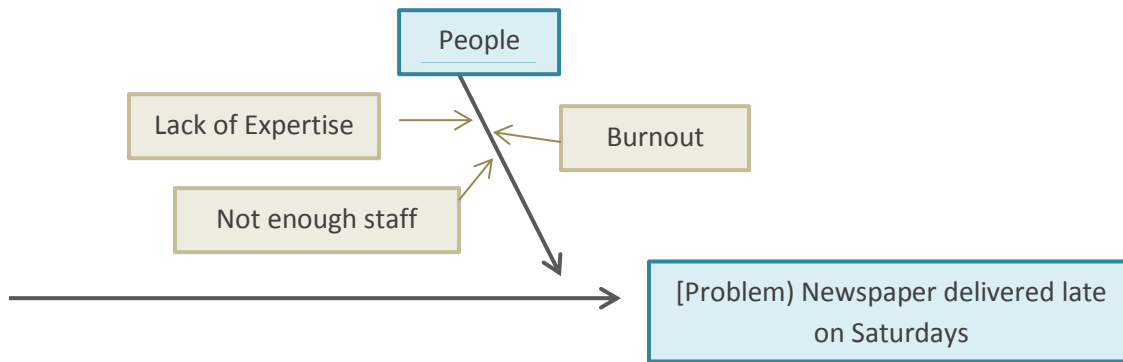
Brainstorm major categories of your process or procedure. Six typical categories are: *Methods, Machines (equipment), People, Materials, Measurement, and Environment*. Think about how this might translate to your home visiting program (i.e. staff, . You may identify different categories as they pertain to your process. Connect these categories to the backbone, in “ribs.”



#### 3. Contributing Factors

Brainstorm possible problem causes, and attach each to the appropriate rib. Your team might find it helpful to place ideas on category ribs as they are generated, or to brainstorm an entire list of ideas and then find the right “rib” for each idea.

Ideally, each contributing factor will fit neatly into a single category, but some causes may link with multiple categories. If you have a contributing factor that fits into more than one category, place it under both, and return to it later. As you continue fleshing out the fishbone, see if you have better clarity.



#### 4. Ask: Why?

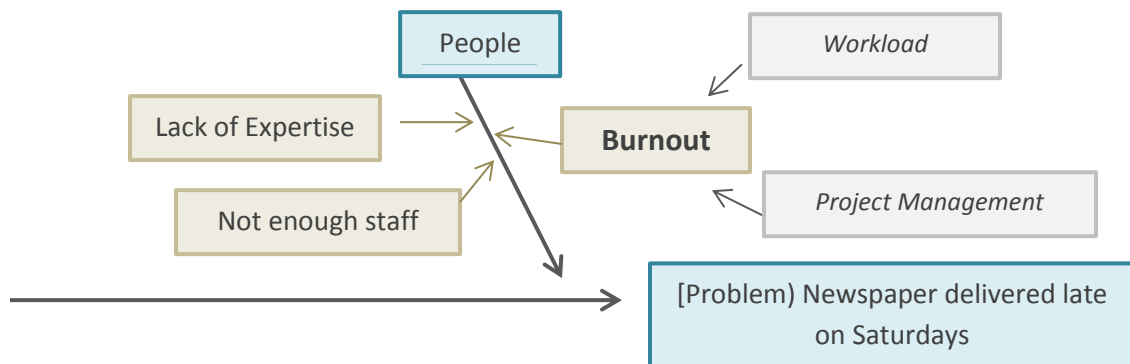
As you list a factor, ask your team why, e.g.:

- *Why does staff lack expertise?* (Because we don't attend training.)
- *Why don't we attend training?* (Because we don't have the funding.)
- *Why don't we have the funding?* (Because we haven't applied for grants.)
- *Why don't we apply for grants?* (Because we're unaware of sources.)

Sometimes this asking process is called the "**Five Whys**."

#### 5. Many Ribs: Deeper Causes

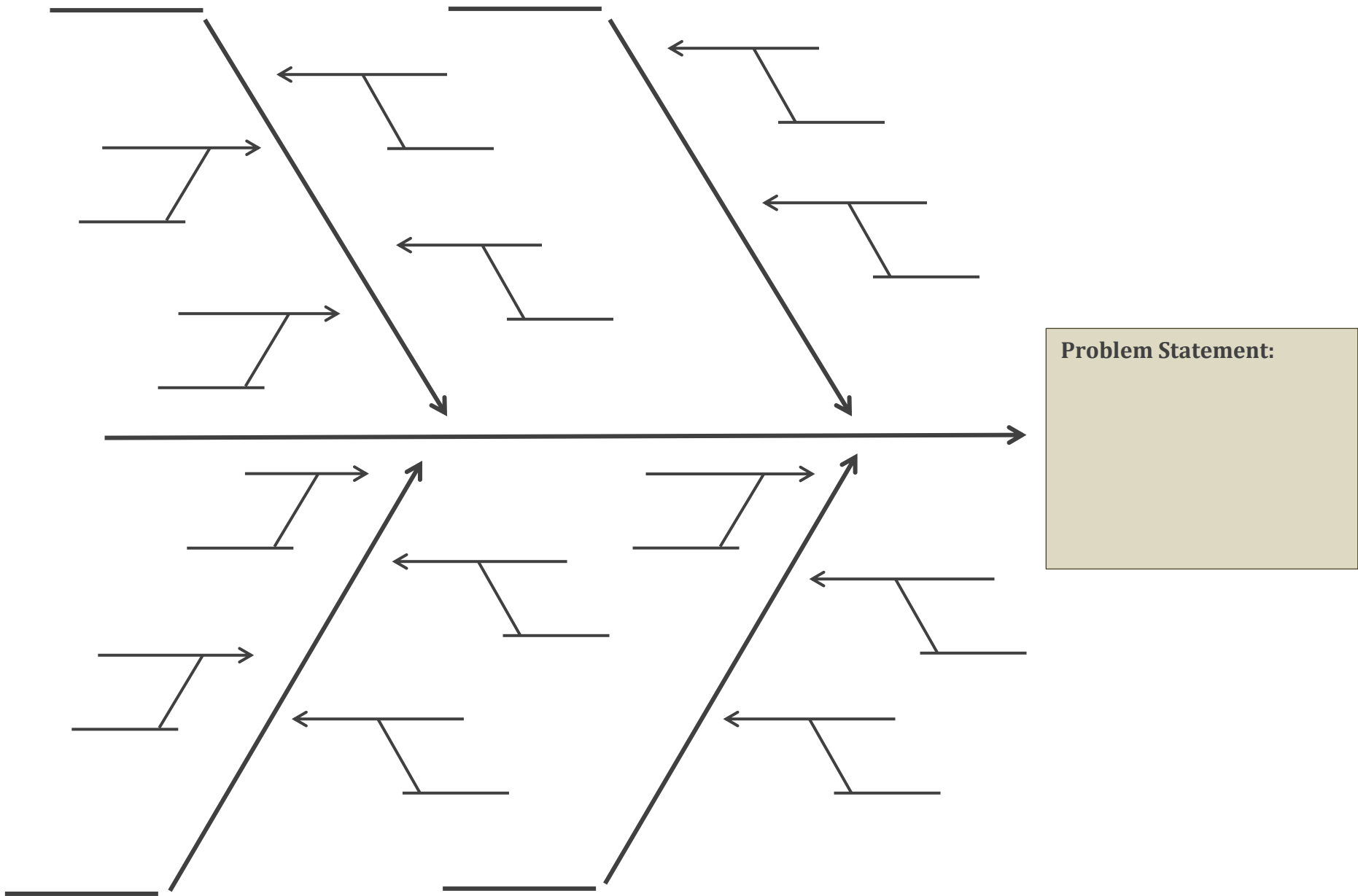
You may end up with multiple branches off of each successively smaller rib. Your team might lack expertise, for example, because of a lack of training, but also because you didn't hire the right people for the job. Treat each contributing factor as its own "mini-rib," and keep asking why each factor is occurring.



#### 6. Test for Root Causes

Test for root causes by looking for causes/themes that appear repeatedly within categories or across major categories.

# Fishbone Diagram Template



# Root Cause – 5 Whys

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*\*Adapted from Centers for Medicare and Medicaid Services [QAPI Tools](#)*

**5 Whys** - Root cause analysis is a structured team process that assists in identifying underlying factors or causes of an event. Understanding the contributing factors or causes of a system failure can help develop actions that sustain corrections.

The **Five Whys** is a simple problem-solving technique that helps to get to the root of a problem quickly. The **Five Whys** strategy involves looking at any problem and drilling down by asking: "Why?" or "What caused this to happen?"

Be careful to avoid answers that are too simple and overlook important details. Typically, the answer to the first "why" should prompt another "why" and the answer to the second "why" will prompt another and so on; hence the name *Five Whys*.

**Directions:** *This exercise is best completed as a CQI team - identify a facilitator to lead the following steps*

- As a team, develop the **problem statement** - be clear and specific (*should relate to project [SMART Aim](#) or element of [Key Driver Diagram](#)*)
- Start with the first why – As a team, agree on the most closely associated factor and work back. To determine if the response is the “root cause” of the problem, consider “If the most recent “why” was corrected, is it likely the problem would have occurred?” If the answer is yes, it is likely this is a contributing factor, not a root cause.
- If the answer provided is a contributing factor to the problem, the team keeps asking “Why?” until there is agreement from the team that the root cause has been identified.
- It often takes three to five whys, but it can take more than five! So keep going until the team agrees the root cause has been identified.

**Tips:**

- Include people with personal knowledge of the processes and systems involved in the problem being discussed.
- Note that the Five Whys technique may not always help you to identify the root cause. Another technique you might consider is the [Fishbone Diagram](#). The fishbone diagram forces you to think more broadly across various categories that could be causing or contributing to the problem.

**Example:** *Here is an everyday example of using the Five Whys to determine a root cause -*

**Problem statement – your car gets a flat tire on your way to work.**

1. **Why** did you get a flat tire? -- *You ran over nails in your garage*
2. **Why** were there nails on the garage floor? -- *The box of nails on the shelf was wet; the box fell apart and nails fell from the box onto the floor.\**
3. **Why** was the box of nails wet? -- *There was a leak in the roof and it rained hard last night. (Root cause=leak in the roof)*

*\*If you stopped here and “solved” the problem by sweeping up the nails, you would have missed the root cause of the problem\**



## “5 Whys” Template

<b>Define the Problem</b> (once sentence description of problem or event):	
<b>1 - Why?</b>	
<b>2 - Why?</b>	
<b>3 - Why?</b>	
<b>4 - Why?</b>	
<b>5 - Why?</b>	
<b>Root Cause(s)</b>	<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> </ol> <p><i>To validate root causes, ask the following: If you removed this root cause, would this event or problem have been prevented?</i></p>

# Implementation – Key Driver Diagrams

\*Adapted from Institute for Health Improvement [Tools: Driver Diagram](#)

A key driver diagram is a visual display of a team's theory of what "drives," or contributes to, the achievement of a project aim. A driver diagram shows the relationship between the overall **aim** of the project, the **primary drivers** (sometimes called "key drivers") that contribute directly to achieving the aim, the **secondary drivers** that are components of the primary drivers, and **specific change ideas to test** for each secondary driver.

Primary drivers are the most important influencers on the aim, and you will have only a few (2 to 5 recommended, may be more); secondary drivers are influencers on (or natural subsections of) the primary drivers. There will likely be several secondary drivers for each primary driver. As you identify each driver, establish a way to measure it.

**Remember:** It's unlikely that a single individual has a clear view of an entire complex system. When developing a driver diagram, enlist the help of team members who are familiar with different aspects of the system under review.

## Instructions:

1. On the left, list the project aim (what will be improved, by how much, for whom, and by when)
2. To the right of the aim, list a few "primary drivers" — the most significant high-level contributors related to the aim you've identified.
3. To the right of each primary driver, list as many "secondary drivers" that influence the primary driver as you can think of. Draw lines to connect the secondary drivers to the primary drivers. *Note: Secondary drivers may relate to more than one primary driver.*
4. To the right of each secondary driver, list specific change ideas you could test to influence/strengthen the secondary driver. *Note: Change ideas can connect to more than one secondary driver.*

See [Topic Specific Key Driver Diagrams](#), or create your own using this [Key Driver Diagram Template](#):

*Example: Increasing nightly sleep*

Aim	Primary Drivers	Secondary Drivers	Change Ideas
Increase average nightly sleep from 7 hours to 8 hours.  (1 extra hour a night)	Environment	<ul style="list-style-type: none"><li>Noise level</li><li>Light in room</li><li>Temperature</li></ul>	<ul style="list-style-type: none"><li>Use ear plugs or white noise machine</li><li>Install darkening shades</li><li>If hot: buy a fan; if cold: add blanket</li></ul>
	Caffeine Intake	<ul style="list-style-type: none"><li>Amount of caffeine</li><li>Time of day consumed</li><li>Coffee habit</li></ul>	<ul style="list-style-type: none"><li>Limit to 2 cups of coffee each day</li><li>Stop drinking caffeine after 12 pm</li><li>Switch to decaf or green tea</li></ul>
	TV	<ul style="list-style-type: none"><li>Time of TV watching</li><li>Intensity/genre of show</li></ul>	<ul style="list-style-type: none"><li>End TV watching after 8pm</li><li>Limit scary or intensive shows to day-time</li><li>Swap TV watching for reading a book</li></ul>

# Implementation – *Plan-Do-Study-Act (PDSA)*

*\*Adapted from Institute for Health Improvement (IHI) [Science of Improvement: Testing Changes](#)*

## Model for Improvement: Plan-Do-Study-Act (PDSA) Cycles

Once your team has agreed on a SMART aim and identified key measures to help monitor success, the next step is to test changes in a real life setting. The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change — by planning it, trying it, observing the results, and acting on what is learned. This is based on the scientific method, used for action-oriented learning.

*See additional resources from the Institute for Health Improvement: [Tips for Testing Changes](#), [Linking Tests of Change](#), [Testing Multiple Changes](#), [Implementing Changes](#), [Spreading Changes](#).*

## Reasons to Test Changes

- To determine which changes will lead to desired improvement
- To evaluate how much improvement can be expected from the change
- To decide whether the proposed change will work in the actual environment of interest
- To decide which combinations of changes will have the desired effects on the important measures of quality
- To evaluate costs, social impact, and side effects from a proposed change
- To minimize resistance upon implementation

## Steps in the PDSA Cycle

**Plan:** Plan the test, including a plan for collecting data

- State the question you want to answer and make a prediction about what you think will happen
- Develop a plan to test the change - (Who? What? When? Where?)
- Identify what data you will need to collect

**Do:** Run the test on a small scale

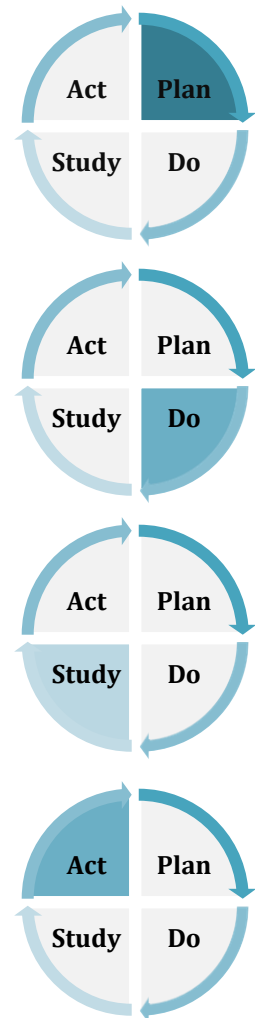
- Carry out the test
- Document problems and unexpected observations
- Collect and begin to analyze the data

**Study:** Analyze the results and compare them to your predictions

- Complete - as a team if possible - your analysis of the data
- Compare the data you collected to your prediction
- Summarize and reflect on what you learned from the data/process

**Act:** Based on what you learned from the test, make a plan for your next step.

- Adapt (make modifications and run another test), adopt (test the change on a larger scale), or abandon (don't do another test on this change idea)
- Prepare a plan for the next PDSA



### *Example of a Test of Change (Plan, Do, Study, Act Cycle)*

Depending on their aim, teams choose [promising changes](#) and use Plan-Do-Study-Act (PDSA) cycles to test a change quickly on a small scale, see how it works, and refine the change as necessary before implementing it on a broader scale. The following example shows how a team started with a small-scale test.

Diabetes: Planned visits for blood sugar management.

- **Plan:** Ask one patient if he or she would like more information on how to manage his or her blood sugar.
- **Do:** Dr. J. asked his first patient with diabetes on Tuesday.
- **Study:** Patient was interested; Dr. J. was pleased at the positive response.
- **Act:** Dr. J. will continue with the next five patients and set up a planned visit for those who say yes.

See [Appendix A](#) for **PDSA Template**

# Measurement – *Run Chart*

*\*Adapted from the Minnesota Department of Health [Public Health and QI Toolbox](#)*

## What is a Run Chart?

A run chart is used to understand trends or patterns in data over a specific period of time. A run chart is a critical tool in tracking overall progress during a CQI project. As you test and implement different change tests, tracking a consistent measure on a run chart can help you determine if the test had the desired effect.

## IHI Run Chart Template

A **Run Chart** can help:

- Track specific data points over time to detect trends, shifts, or cycles
- Compare a measure before and after the implementation of solution to measure impact
- Focus attention on real changes, not normal variation
- Track useful information for predicting trends

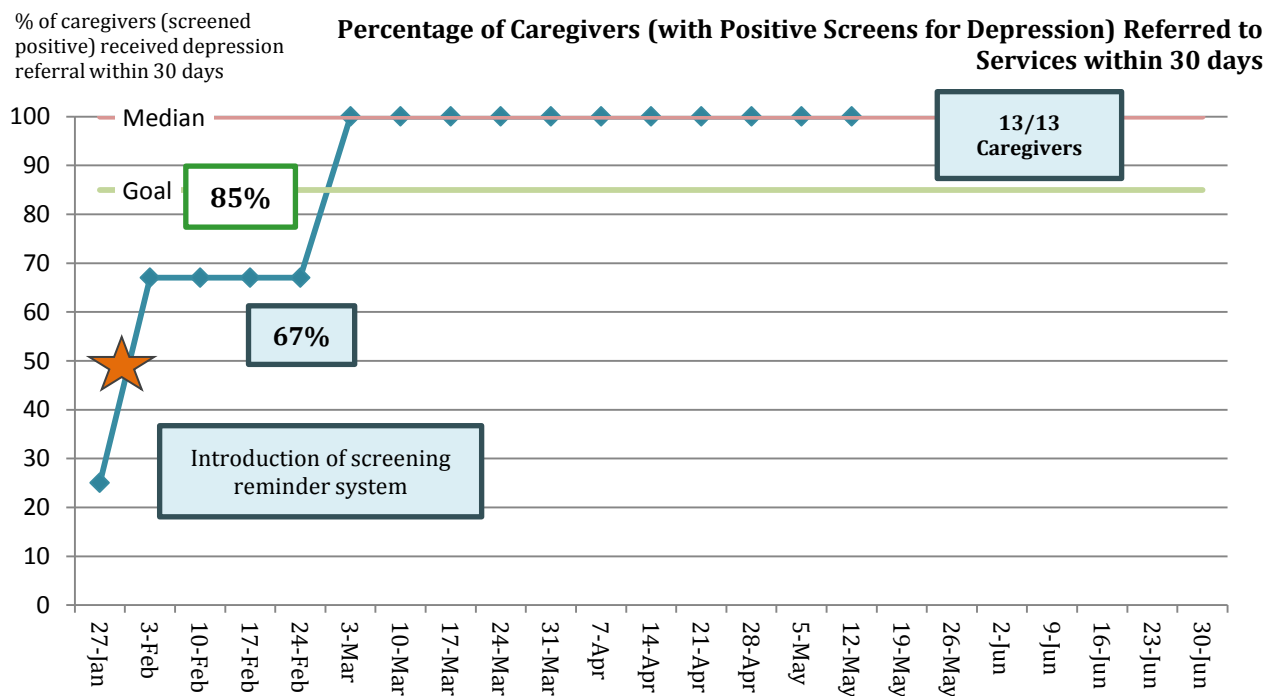
The **Run Chart** is a running record of a process over time:

- The vertical axis represents the process being measured
- The horizontal axis represents the units of time by which the measurements are made
- The centerline of the chart is the mean or average

A **run** is defined as one or more consecutive data points on the same side of the mean line.

**Example:** (Developed for MIECHV CQI Practicum, 2017)

*Smart Aim: By **June 30, 2017**, we will increase from program baseline (0% and 50%) to **85%** the percentage of primary caregivers with a positive screen for depression who receive a referral for appropriate services within one month (30 days) of screening.*



# Measurement – Recognizing Change

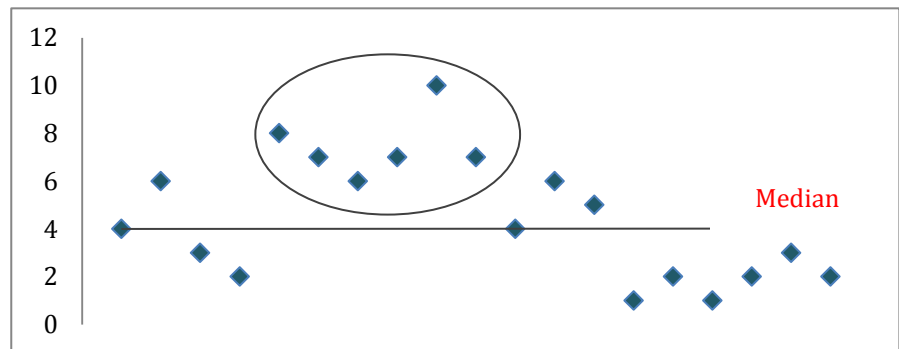
*\*Adapted from DOHVE MIECHV CQI Practicum*

There are 3 relatively simple rules that help to decide if the data represents a random pattern or a non-random pattern. A non-random pattern would typically indicate a **significant change**. Data recorded on a run chart (over time) will begin to show certain patterns, trends, or markers. Using the following three rules when analyzing run chart data, you can begin to interpret whether or not your CQI efforts are generating the change you wish to see. When looking at the data, we look for three potential indicators of change:

- Shifts
- Trend
- Astronomical Point

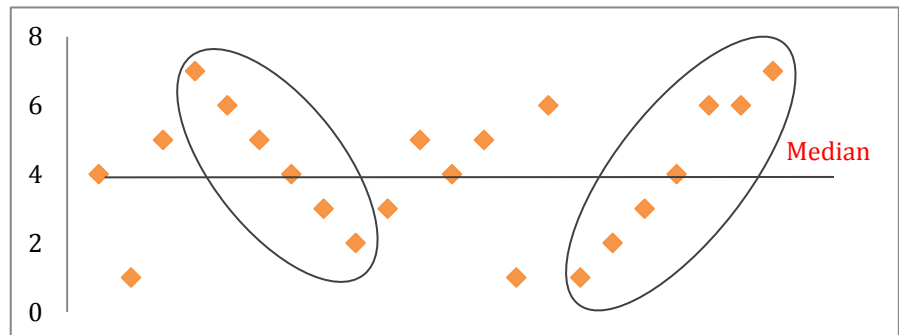
**Rule 1 – Shifts:** 6 or more points on the same side of the median (*Note: a point on the median does not cancel or count toward a shift*)

A **shift** refers to data movement above or below the median line. Concentration of data points above or below may indicate a change or *shift* in results.



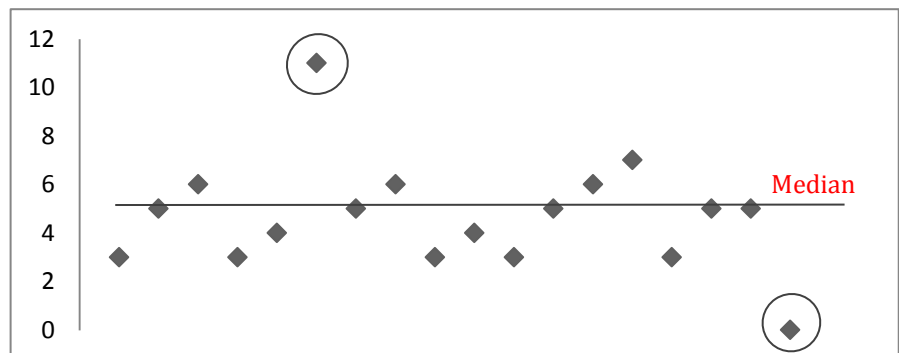
**Rule 2 – Trend:** 5 points that all go in the same direction – all rise or all decline (*Note: Ties between two consecutive points don't cancel or count toward a trend*)

A **trend** looks at the direction of data point movement (up or down). The sequential ascent or descent of 5 or more data points on a run chart may suggest a meaningful change, rather than random occurrences.



**Rule 3 – Astronomical Point:** An obviously different value (*Note: Every graph has a highest and lowest point – that doesn't mean it's astronomical*)

Unlike shifts or trends, an **astronomical point** focuses on the outliers – something out of the ordinary. Identifying an astronomical point can be subjective, as a team you will need to agree that a single data point indicates a change and is not a coincidence.



Provost, L. P., & Murray, S. (2011). *The health care data guide: learning from data for improvement*. John Wiley & Sons.

Perla, R. J., Provost, L. P., & Murray, S. K. (2011). The run chart: a simple analytical tool for learning from variation in healthcare processes. *BMJ*

## *Acknowledgements and Links for Additional CQI Tools and Resources*

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### **DOHVE – MIECHV CQI Practicum (Wave 1) –**

Instructors -

*Karen Zeribi, SHIFT Consulting*

*MaryCatherine Arbour, Brigham and Women's Hospital*

*Special thanks to the Montana MIECHV CQI Practicum team*

### **Minnesota Department of Health - [Public Health & QI Toolbox](#)**

### **Institute for Healthcare Improvement (IHI)**

Tools - [Quality Improvement Essentials Toolkit](#)

How to Improve - [Science of Improvement](#)

Measures - [Establishing Measures](#)

### **Design Options for Home Visiting Evaluation - [\\*See Continuous Quality Improvement Section](#)**

### **American Society for Quality - [The 7 Basic Quality Tools for Process Improvement](#)**

### **Centers for Medicare and Medicaid Services: [QAPI Tools](#)**

### **National Network of Public Health Institutes: [Resources, Performance & Quality Improvement](#)**

## Appendix A: CQI Deliverables Forms

### CQI Project Plan (August and February Monthly Enrollment Reports)

<b>Program Name, Model</b>	
<b>Project Period</b>	<input type="checkbox"/> Period 1 (July – December) <input type="checkbox"/> Period 2 (January – June)
<b>CQI Project Topic</b>	<input type="checkbox"/> Caregiver Depression Screening/Referral <input type="checkbox"/> Parent Child Interaction <input type="checkbox"/> Intimate Partner Violence Screening/Referral <input type="checkbox"/> Family Engagement
<b>Problem Statement/Opportunity for Change:</b>	

### CQI Team

<b>Team Sponsor</b>	
<b>Team Leader</b>	
<b>Team Members</b>	1.
	2.
	3.
	4.
	5.
	6.
<b>Team Structure:</b> <i>How often will your team meet?</i> <i>Who is responsible for convening team meetings?</i>	

### CQI SMART Aim

<b>SMART Aim Statement</b> (Specific, Measurable, Achievable, Relevant, Time-bound)	
<i>When:</i>  <i>Achieve What:</i>  <i>For Whom:</i>	
<b>How will you measure success?</b> (Indicators/Measures)	
<i>What will you measure?</i>	
<i>How will you measure it?</i>	
<b>Considerations</b> (Assumptions/Predictions, Potential Barriers/Obstacles)	
<i>Assumptions/Predictions?</i>	
<i>Potential Barrier/Obstacles?</i>	



### PDSA Template (Quarter 1 and 3)

<b>Program Name, Model</b>	
<b>Project Period</b>	<input type="checkbox"/> Period 1 (July – December) <input type="checkbox"/> Period 2 (January – June)
<b>CQI Project Topic</b>	<input type="checkbox"/> Caregiver Depression Screening/Referral <input type="checkbox"/> Parent Child Interaction <input type="checkbox"/> Intimate Partner Violence Screening/Referral <input type="checkbox"/> Family Engagement
<b>AIM Statement</b>	
<b>Aim Update:</b> <i>Were any changes made to the SMART Aim statement or project plan since submitting the Team Charter &amp; Plan?</i>  <i>If so, please describe:</i>	

### PDSA

<b>PDSA - Provide a brief, but detailed update on <b>change tests</b> implemented</b>	
<b>Change test:</b>	
<b>Plan</b>	<i>What question(s) do you want to answer?</i>
	<i>What changes do you predict as a result of this test?</i>
	<i>Who is responsible?</i>
	<i>Tasks/Tools Needed to Complete Test</i>
<b>Do</b>	<i>How was the test carried out?</i>

	<p>–</p> <p>–</p> <p><i>What did you observe that wasn't part of the plan?</i></p> <p>–</p> <p>–</p>
Study	<i>What did the data tell you?</i>
	<i>What results did you see?</i>
	<i>What did you learn?</i>
Act	<i>Did you adopt, adapt, or abandon this change?</i>
<b>Looking ahead</b> – <i>Based on what you learned, what will you test next?</i>	

## CQI Project Summary and Reflection (Quarter 2 and 4)

### Project Summary and Reflection

<b>Program Name, Model</b>	
<b>Project Period</b>	<input type="checkbox"/> Period 1 (July – December) <input type="checkbox"/> Period 2 (January – June)
<b>CQI Project Topic</b>	<input type="checkbox"/> Caregiver Depression Screening/Referral <input type="checkbox"/> Parent Child Interaction <input type="checkbox"/> Intimate Partner Violence Screening/Referral <input type="checkbox"/> Family Engagement
<b>AIM Statement</b>	
<b>Aim Update:</b> <i>Were any changes made to the SMART Aim statement or project plan since submitting the Team Charter &amp; Plan? If so, please describe:</i>	

Project Summary	
<b>Did you see changes expected?</b>  <b>Changes you didn't expect?</b>	
<b>Which tests were successful?</b>  <b>How will you sustain these changes?</b>	
<b>What did you learn?</b>  <b>Did anything surprise you?</b>	
<b>How will you apply what you learned?</b>	

## Appendix B: State Topic Key Driver Diagrams

**Caregiver Depression Key Driver Diagram** *\*Adapted from HV CoIIN*

	Primary Drivers	Secondary Drivers	Changes/Interventions
<b>State SMART Aim:</b>  By June 30th 2018 (end of SFY), <b>90%</b> of HVSA clients will be screened for Caregiver Depression, <b>85%</b> of positive screens will be offered a referral, and <b>50%</b> provided a referral will access services.	<b>Primary Driver 1:</b> Standard protocols and procedures for caregiver depression	<b>Standard protocols and procedures for:</b> <ol style="list-style-type: none"> <li>1. Screening</li> <li>2. Scoring and communicating results</li> <li>3. Referrals</li> <li>4. Supervisory support (reflective supervision)</li> <li>5. Use of screening and referral data</li> </ol>	<b>Develop standard protocols and procedures for:</b> <ul style="list-style-type: none"> <li>✓ PHQ-9 screening and scoring</li> <li>✓ Mental health referrals</li> <li>✓ Addressing emergency/crisis situations</li> </ul> <ul style="list-style-type: none"> <li>✓ Decision tree tool for Home Visitors to navigate various situations</li> </ul>
	<b>Primary Driver 2:</b> Competent and skilled workforce to address caregiver depression	<b>Knowledge and comfort in:</b> <ol style="list-style-type: none"> <li>1. Training in mental health</li> <li>2. Screening for caregiver depression</li> <li>3. Communicating results and discussing options for mental health services</li> <li>4. Referral protocols and procedures</li> </ol>	<ul style="list-style-type: none"> <li>✓ Role playing exercise to strategize approaches for the depression screening and referral process (introducing the screening, discussing results, offering a referral, follow-up)</li> <li>✓ Develop script/guide to facilitate more effective screenings/referrals and consistency of messaging</li> <li>✓ Utilize reflective supervision for pre-screen consultation</li> </ul>
	<b>Primary Driver 3:</b> Available and appropriate Mental Health Services in community	<ol style="list-style-type: none"> <li>1. Culturally and linguistically appropriate services</li> <li>2. Program relationships/connection to mental health providers (MOUs, contracts, in-house, etc.)</li> <li>3. Process for facilitating “warm” referrals</li> </ol>	<ul style="list-style-type: none"> <li>✓ Identify available and appropriate community resources</li> <li>✓ Develop and maintain referral pathways, MOUs with various mental health providers</li> <li>✓ Establish and maintain relationship with mental health providers to facilitate “warm” referrals</li> <li>✓ Establishment of in-house, evidence-based mental health services</li> </ul>
	<b>Primary Driver 4:</b> Active family engagement in caregiver depression support (knowledge of mental health and services)	<ol style="list-style-type: none"> <li>1. Families/Caregivers understand the symptoms and consequences of depression</li> <li>2. Families know the benefits of addressing depression for the mother/caregiver, children, and family</li> <li>3. Caregiver is responsive to conversations about mental health</li> <li>4. Family members consider referrals to services acceptable and are comfortable seeking services (e.g. addressing stigma, cultural, and geographic barriers)</li> </ol>	<ul style="list-style-type: none"> <li>✓ Protocols for screening within optimal window (within 90 days of enrollment, while also allowing for trust/relationship to develop)</li> <li>✓ Integrate discussion of mental health into earlier visit to “plant the seeds” for conversation/screening</li> <li>✓ Develop materials (or utilize model materials) to use with families to discuss, identify, and mitigate depression</li> <li>✓ Communication techniques for discussing mental health in culturally appropriate manner</li> </ul>
	<b>Primary Driver 5:</b> Competent and skilled supervisory support for Home Visitors	<ol style="list-style-type: none"> <li>1. Skills and knowledge to interpret program-level data and trends</li> <li>2. Supervisors are comfortable and competent to provide reflective supervision to address issues of mental health</li> </ol>	<ul style="list-style-type: none"> <li>✓ Training for supervisors to increase knowledge/understanding of mental health</li> <li>✓ Reflective supervision to help home visitors prepare or debrief depression screening</li> </ul>
	<b>Primary Driver 6:</b> Data system for tracking all clients’ depression screening timeliness, results, referral, and acceptance of referral	<ol style="list-style-type: none"> <li>1. Agency has policy and protocols to track caregiver depression data (screening, results)</li> <li>2. Agency has policy and protocols to track data on referral, acceptance or referral, follow-up</li> <li>3. Home Visitors are practicing all data-related protocols</li> <li>4. Program management/supervisors analyze and use depression data to inform and shape practice</li> </ol>	<ul style="list-style-type: none"> <li>✓ Tracking system for depression screening time points, results, referral, and follow-up.</li> <li>✓ Tracking system for team meetings to review CQI data and its use for guiding practice improvement</li> </ul>

## Intimate Partner Violence Key Driver Diagram

	Primary Drivers	Secondary Drivers	Changes/Interventions
<b>State SMART Aim:</b>  By June 30th 2018 (end of SFY), <b>90%</b> of HVSA clients will be screened for Intimate Partner Violence and <b>85%</b> of positive screens will be offered a referral.	<b>Primary Driver 1:</b> Standard protocols and procedures for Intimate Partner Violence (IPV)	<b>Standard protocols and procedures for:</b> <ol style="list-style-type: none"> <li>1. Appropriate screening</li> <li>2. Scoring and communicating results</li> <li>3. Referrals</li> <li>4. Safety planning</li> <li>5. Supervisory support (reflective supervision)</li> <li>6. Use of screening and referral data</li> </ol>	<b>Develop standard protocols and procedures for:</b> <ul style="list-style-type: none"> <li>✓ Safe and appropriate screening and discussion of results</li> <li>✓ IPV referrals and safety planning</li> <li>✓ Addressing emergency/crisis situations</li> <li>✓ Decision tree tool for Home Visitors to navigate various situations</li> <li>✓ Toolkit for safety planning</li> </ul>
	<b>Primary Driver 2:</b> Competent and skilled workforce to address IPV	<b>Knowledge and comfort in:</b> <ol style="list-style-type: none"> <li>1. Recognizing indicators of IPV</li> <li>2. Screening for IPV</li> <li>3. Communicating results and discussing options for IPV resources</li> <li>4. Referral protocols and procedures</li> </ol>	<ul style="list-style-type: none"> <li>✓ Role playing exercise to strategize approaches for IPV screening and referral process (introducing the screening, discussing results, offering a referral)</li> <li>✓ Develop script/guide to facilitate more effective screenings/referrals and consistency of messaging</li> <li>✓ Train Home Visitors in identifying and recognizing indications of IPV</li> <li>✓ Train Home Visitors to conduct</li> <li>✓ Utilize reflective supervision for pre-screen consultation</li> </ul>
	<b>Primary Driver 3:</b> Available, appropriate, and sensitive IPV services in community	<ol style="list-style-type: none"> <li>1. Culturally and linguistically appropriate services/resources</li> <li>2. Program relationships/connection to IPV service/resource providers (MOUs, contracts, etc.)</li> <li>3. Process for facilitating “warm” referrals</li> </ol>	<ul style="list-style-type: none"> <li>✓ Identify available and appropriate community resources</li> <li>✓ Develop and maintain referral pathways, MOUs with various IPV resources</li> <li>✓ Establish and maintain relationship with IPV resources to facilitate “warm” referrals</li> </ul>
	<b>Primary Driver 4:</b> Client trust and perception of safety to share experiences of IPV	<ol style="list-style-type: none"> <li>1. Client recognizes and understands the patterns and forms of IPV</li> <li>2. Client understand the effect of IPV on child development</li> <li>3. Previous conversations about IPV/Safety</li> </ol>	<ul style="list-style-type: none"> <li>✓ Protocols for screening within optimal window (within 90 days of enrollment, while also allowing for trust/relationship to develop)</li> <li>✓ Communication techniques for discussing IPV health in culturally appropriate manner “Plant seeds” – Integrate ideas about safety, healthy relationships and well-being into earlier visits or conversations</li> </ul>
	<b>Primary Driver 5:</b> Strong community institutions to promote safety (financial, housing, social services, DV programs, shelters)	<ol style="list-style-type: none"> <li>1. Clients are aware of and know how to access available resources in the community</li> <li>2. Legal and DV advocates knowledgeable about the system of resources</li> <li>3. Legal and DV advocates knowledgeable and trusted in the community</li> <li>4. Diverse services offered to meet different needs</li> <li>5. Strong partnerships between DV advocates and law enforcement</li> <li>6. Law enforcement educated and aware of DV risks</li> </ol>	<ul style="list-style-type: none"> <li>✓ Awareness raising/outreach strategies to educate clients about available resources and how to navigate those supports (i.e. written materials, HVs, etc.)</li> <li>✓ Opportunities to connect and bridge across different resources/programs in the community, create partnerships and warm referral pathways</li> <li>✓ Outreach opportunities for advocates to connect with community (both people and other partners)</li> <li>✓ Identify gaps in services or missing services (may be language, culture, targeted services, etc.)</li> </ul>
	<b>Primary Driver 6:</b> Competent and skilled supervisory support for Home Visitors	<ol style="list-style-type: none"> <li>1. Skills and knowledge to interpret program-level data and trends</li> <li>2. Supervisors are comfortable and competent to provide reflective supervision to address issues of IPV, including</li> </ol>	<ul style="list-style-type: none"> <li>✓ Training for supervisors to increase knowledge/understanding of intimate partner violence</li> <li>✓ Reflective supervision to help home visitors prepare or debrief IPV screening and referrals</li> </ul>

## Parent-Child Interaction Key Driver Diagram

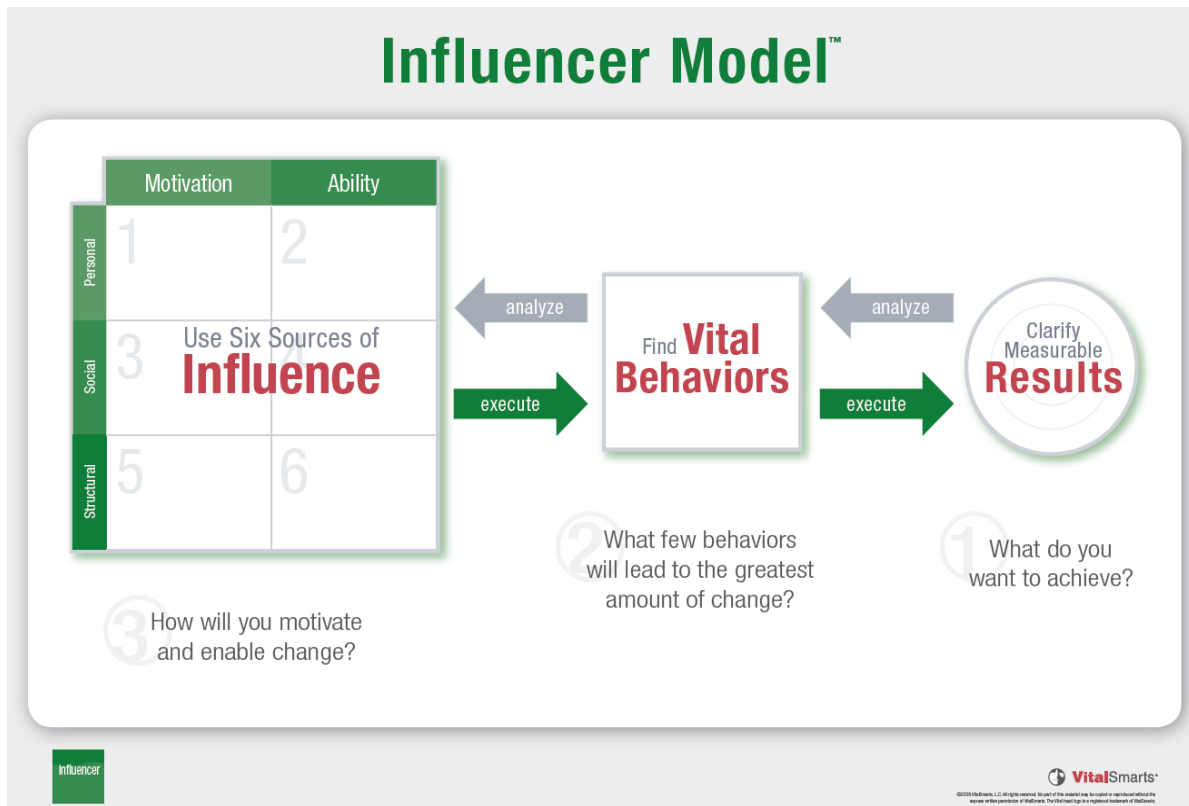
	Primary Drivers	Secondary Drivers	Changes/Interventions
<b>State SMART Aim:</b>  By June 30th, 2018 (end of SFY), <b>85%</b> of HVSA clients will have an opportunity to reflect upon the interactions, routines, and environment that impact child development, based on a conversation that emerges from use of a validated Parent/Child Interaction Assessment tool.	<b>Primary Driver 1:</b> Program/Home Visitor commitment to supporting child development through emphasis on supportive interactions between a child and his/her parent	<b>Potential indicators of belief in this approach:</b> <ol style="list-style-type: none"> <li>1. HVs knowledgeable in dyadic approach</li> <li>2. Program orientation process introduces family to this approach</li> <li>3. Home Visit Plans intentionally integrates support of P/C Interactions</li> <li>4. Program Supervisors provide ongoing coaching for HVs to strengthen this approach</li> </ol>	<ul style="list-style-type: none"> <li>✓ Strengthen orientation process for new HVs to understand the approach of supporting P/C Interactions</li> <li>✓ Group book share for HV staff: e.g. <u>Developmental Parenting</u></li> <li>✓ Utilize Model Materials and Training regarding P/C Interaction (planning visits, co-creation with parents, use of home materials, resources within Center on the Social and Emotional Foundations for Early Learning (CSEFEL) website</li> <li>✓ Facilitate dialogues with Home Visiting team to reorient team to P/C Interaction approach Peer Mentoring (1:1 or group) to support HVs growing in this P/C Interaction approach</li> </ul>
	<b>Primary Driver 2:</b> Comfort and skill of Home Visitor in engaging parents in a validated Parent/Child (P/C) Interaction Assessment tool to promote dialogue about parent child interactions	<b>Comfort and skill in:</b> <ol style="list-style-type: none"> <li>1. HV understanding of purpose and benefits of P/C Interaction assessment</li> <li>2. Home Visits facilitate dialogue about P/C relationship and parents understand the purpose of these conversations</li> <li>3. HVs comfort and knowledge of the flow of a validated P/C Interaction tool</li> <li>4. HVs skilled and comfortable responding to parent answers in a way that builds parental confidence and sparks ideas that could support child's experiences</li> <li>5. Home Visitor confidence and comfort in utilizing culturally humble, trauma informed approach to asking and listening</li> </ol>	<ul style="list-style-type: none"> <li>✓ Reemphasize the purpose and opportunity of P/C Interaction assessment as a part of practice (i.e. informing service planning, identify potential concerns, etc.)</li> <li>✓ Role playing exercise to strategize introduction of conversation to parents</li> <li>✓ Develop script/guide to facilitate more effective P/C Interaction assessment and consistency of messaging</li> <li>✓ Practice techniques that help HVs pivot back to dialogue around a child's experiences when focus moves to other family stressors</li> <li>✓ Utilize reflective supervision for pre/post-assessment consultation</li> <li>✓ Training on engaging sensitive dialogue with families</li> </ul>
	<b>Primary Driver 3:</b> Standard protocols and procedures for assessing P/C Interaction through the use of a validated assessment tool (i.e. HOME, DANCE)	<b>Standard protocols and procedures for:</b> <ol style="list-style-type: none"> <li>1. Clear program protocols for when to complete the HOME Assessment</li> <li>2. Support with interpretation of results, as needed</li> <li>3. Understanding of where to enter assessment into data system</li> </ol>	<ul style="list-style-type: none"> <li>✓ Create written protocol for use of validated P/C Interaction Assessment tool</li> <li>✓ Utilize reflective supervision to reflect upon assessment, results, follow up conversations, how to use info to inform planning</li> <li>✓ Written guidance and protocols for utilizing P/C Interaction data to inform practice</li> </ul>
	<b>Primary Driver 4:</b> Client trust and perception of safety to share of their own childhood experiences and consider the experiences they are creating for their child	<ol style="list-style-type: none"> <li>1. Client understands the program's approach of supporting child development through strengthening the parent-child relationship</li> <li>2. Client feels Home Visitor understands the cultural context of a family's own upbringing and approach to parenting</li> <li>3. Client feels the Home Visitor is sensitive to parent disclosures of past childhood experiences</li> <li>4. Client feels acknowledged, supported, confidence built through sensitive conversations</li> </ol>	<ul style="list-style-type: none"> <li>✓ Develop orientation for families focused on their role as their child's most important teacher</li> <li>✓ Develop orientation for families to understand how Home Visits will be centered around strengthening parent-child relationship</li> <li>✓ Facilitate dialogue with HV team to address potential cultural and experiential impacts on parents, considering client perception of quality of this</li> <li>✓ Integrate support of P/C Interaction into reflective supervision</li> <li>✓ Administer short feedback form/survey at end of home visits to gauge parents reception to conversations related to parenting and P/C interaction</li> </ul>
	<b>Primary Driver 5:</b> Competent and skilled supervisory support for Home Visitors to promote positive P/C Interaction	<ol style="list-style-type: none"> <li>1. Technical leadership provides concrete context to assessment process</li> <li>2. Reflective supervision supports HVs to engage in sensitive conversations</li> <li>3. Supervisors skilled and comfortable coaching HVs to engage families with difficult histories or experiences</li> <li>4. Supervisors conduct periodic observation and reflection on how Home Visit effectively incorporates a validated P/C Interaction Assessment tool and/or general promotion of P/C Interaction.</li> </ol>	<ul style="list-style-type: none"> <li>✓ Training for supervisors to increase knowledge/understanding of how P/C Interaction assessment supports conversations about P/C Interaction</li> <li>✓ Reflective supervision to help home visitors prepare or debrief conversation with families</li> <li>✓ Observation by supervisor or peer to provide reflection/feedback on P/C Interaction Assessment process</li> <li>✓ Observation using Home Visit Rating Scale (HOVRS) to reflect on general approach to supporting P/C interactions within Home Visits</li> </ul>

## Family Engagement Key Driver Diagram *\*Adapted from HV CoIIN*

	Primary Drivers	Secondary Drivers	Changes/Interventions
<b>State SMART Aim:</b>  By June 30th 2018 (end of SFY), <b>70%</b> of families receive the expected number of home visits (as defined by model).	<b>Primary Driver 1:</b> Competent and skilled workforce to support enrollment and retention	<ol style="list-style-type: none"> <li>1. Home visitors (HVs) confident and skilled in supporting families through enrollment, early engagement</li> <li>2. HVs confident and skilled in supporting family retention</li> <li>3. Timely and effective supervisory support</li> <li>4. Programs adaptable in service delivery style, hiring, and training to meet the diverse needs of families</li> <li>5. Training, coaching, leadership support to ensure home visiting staff feel adequately supported/competent to do the job</li> </ol>	<ul style="list-style-type: none"> <li>✓ Support to develop interpersonal relationships and adult attachment</li> <li>✓ Clear policy and protocols for enrollment and for intense early engagement and retention for current and new home visitors</li> <li>✓ Observation by supervisor of home visits</li> <li>✓ Focused supervision on key points in HV-client relationship (i.e., enrollment, intense early engagement, ongoing retention)</li> <li>✓ Materials available to facilitate engagement with families (may utilize model materials or develop new materials)</li> </ul>
	<b>Primary Driver 2:</b> Comprehensive data-tracking system and protocols	<ol style="list-style-type: none"> <li>1. Policy to assess and track enrollment, early engagement, and retention</li> <li>2. Policy/protocol to assess and track support to and retention of home visitors</li> </ol>	<ul style="list-style-type: none"> <li>✓ Initial and ongoing training for HVs on policies and procedures for data tracking and management</li> <li>✓ Process for reviewing and using improvement data (e.g., weekly team meeting)</li> </ul>
	<b>Primary Driver 3:</b> Prompt and appropriate enrollment of eligible families	<b>External Sources:</b> <ol style="list-style-type: none"> <li>1. Sufficient number of referral sources and referrals per source within target/high risk areas</li> <li>2. Coordinated system response for linking referrals (families) to appropriate home visiting programs (e.g. centralized intake, health plan provider uses decision tree)</li> <li>3. Referred families meet program criteria</li> </ol> <b>Internal Processes:</b> <ol style="list-style-type: none"> <li>4. Short time from referral to first home visit</li> <li>5. Identification of characteristics of families who do not enroll</li> <li>6. Positive and welcoming recruitment process for all families</li> </ol>	<b>External Sources:</b> <ul style="list-style-type: none"> <li>✓ Outreach and education to referral sources for eligibility of families to home visiting (e.g., access criteria, identifying “goodness of fit”)</li> <li>✓ Outreach to HV clients to “refer” a friend to home visiting services</li> <li>✓ Streamlined process from referral source to home visiting program (i.e., warm handoff for families)</li> </ul> <b>Internal Processes;</b> <ul style="list-style-type: none"> <li>✓ Policy and protocol (with written guidelines) for assessing and determining eligibility of families</li> <li>✓ Standardized and welcoming intake process</li> <li>✓ Protocol in place for process steps, from assessment to first home visit</li> <li>✓ Completed family checklists on the family’s wants and needs for home visiting</li> </ul>
	<b>Primary Driver 4:</b> Intense early engagement (i.e., during first 3 months)	<ol style="list-style-type: none"> <li>1. HVs flexible and responsive to family needs</li> <li>2. Cultural and community norms around parenting and service utilization valued and used to drive delivery of service</li> <li>3. Early referral of families to other community supports and services</li> <li>4. Understand characteristics of families who leave early used to inform/refine policy and home visitor practice</li> <li>5. Trusting partnership between HV and family</li> <li>6. Early goals set by family</li> </ol>	<ul style="list-style-type: none"> <li>✓ Program flexibility in time and location of service delivery to meet family preferences</li> <li>✓ Process for early linkage of families to other community supports and services that includes assisting families with reducing barriers and following up on effectiveness of referral</li> <li>✓ Focus group/follow-up surveys with families that are both in and leaving the program</li> <li>✓ Check-in at 3 months (“How is home visiting going for you?”)</li> <li>✓ Communication strategies that enhance HV-family relationships</li> <li>✓ Protocol for addressing missed visits</li> </ul>
	<b>Primary Driver 5:</b> Active involvement of families in home visiting program	<ol style="list-style-type: none"> <li>1. Trusting partnership between HV Program and family</li> <li>2. Families involved as leaders in the HV program</li> <li>3. Reliable and timely scheduling, visit completion and follow-up by home visitors</li> <li>4. HVs attentive and responsive to evolving needs of families (e.g. refine early goals with families that are not working, met, etc.)</li> <li>5. Families identify what “success” is</li> </ol>	<ul style="list-style-type: none"> <li>✓ Process for family to meet other team members to increase connection with program staff</li> <li>✓ Parents included as members of policy council</li> <li>✓ Parents included as members of QI teams</li> <li>✓ Parent-led support groups (e.g., father involvement, group connections)</li> <li>✓ Flexibility in time/location of service delivery to meet family preferences</li> <li>✓ Reliability on the part of home visitors to schedule and keep visits (not rescheduling/cancelling frequently)</li> <li>✓ Home visit information routinely gathered from families about their needs, personal goals, and expectations of the program; services then provided based on this input</li> </ul>

## Appendix C: Confronting Resistance

\*Patterson, K., Grennt, J., Maxfield, D. McMillan, R. & Switzler, A. (2008). *The Influencer: The Power to Change Anything*. New York: McGraw-Hill.



### 1. Clarify the Measurable Results

Clarify measurable results. What do you want to accomplish?

What are the measures used to track progress?

Who is involved in the efforts (on your team)? Is it multi-disciplinary?

### 2. Identify the Vital Behaviors

List the vital few behaviors that you want to influence that will directly impact the desired results (*Note: these are behaviors, not results; behaviors should be recognizable and repeatable.*)

Vital few behaviors you would like others to do:	There is credible research to validate the behavior		We know who does this behavior well & how	
1	yes	no	yes	no
2	yes	no	yes	no
3	yes	no	yes	no



Select strategies from at least 4 squares (sources of influence). Check all that apply.

	Motivation: <i>Am I motivated to do it?</i>	Ability: <i>Am I able to do it?</i>
Personal	<b>Make the Undesirable Desirable</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Create a game, making something that is neutral or even detestable into something fun</li> <li><input type="checkbox"/> Focus on sense of accomplishment, values, pride and competition</li> <li><input type="checkbox"/> Humanize the behavior (powerful vicarious stories/ personal experience, change numbers for names, etc.)</li> <li><input type="checkbox"/> Create new experiences and motives that connect to a person's sense of self (intrinsic motivation)</li> </ul>	<b>Surpass Your Limits</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Deliberate practice with full attention: trying the skill without distractions and with continued feedback</li> <li><input type="checkbox"/> Frequent/ rapid feedback against a clear goal</li> <li><input type="checkbox"/> Break mastery into "mini" goals that can be met along the way and build confidence</li> <li><input type="checkbox"/> Prepare for setbacks and build in failure signals to know when the strategy needs refinement</li> </ul>
Social	<b>Harness Peer Pressure</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Go after early adopters, not innovators (who are shunned by others as outsiders)</li> <li><input type="checkbox"/> Get the socially-connected and respected opinion leaders behind the change</li> <li><input type="checkbox"/> Get leaders on board</li> <li><input type="checkbox"/> Make the "undiscussable" discussable</li> <li><input type="checkbox"/> Use vicarious stories and experiences to create new norms</li> <li><input type="checkbox"/> Focus on what is going right and generously offer praise</li> </ul>	<b>Find Strength in Numbers</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enlist the power of social capital—unleash the enabling power of a network of relationships.</li> <li><input type="checkbox"/> Create multi-disciplinary teams.</li> <li><input type="checkbox"/> Resist the urge to attack detractors to achieving the goal; instead, co-opt them into helping.</li> <li><input type="checkbox"/> Engage coaches, outside experts to identify the "blind spots".</li> <li><input type="checkbox"/> Build solidarity—act for the larger cause and good of everyone else.</li> </ul>
Structural	<b>Design Rewards and Demand Accountability</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Draw on intrinsic satisfaction and social support first. Only then try extrinsic rewards (which can backfire)</li> <li><input type="checkbox"/> Individual rewards/ award ceremonies can kill teamwork – others leave feeling demotivated and upset because they weren't recognized</li> <li><input type="checkbox"/> Use incentives wisely—quick reinforcement, gratifying, and clearly tied to the vital behaviors being addressed.</li> <li><input type="checkbox"/> Less is more—use small recognition efforts.</li> <li><input type="checkbox"/> Don't be afraid to reward small improvements, but reward right results and right behaviors</li> <li><input type="checkbox"/> Watch for divisive incentives</li> <li><input type="checkbox"/> Use punishment wisely (only for violating a serious core value when lack of punishment sends a louder message)</li> </ul>	<b>Change the Environment</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Make the invisible visible with photos, stories, numbers, etc.</li> <li><input type="checkbox"/> Add cues in your environment to promote the right behavior</li> <li><input type="checkbox"/> Repeatedly provide complete and accurate data / information</li> <li><input type="checkbox"/> Put people physically close for collaboration</li> <li><input type="checkbox"/> Leave work visible and accessible</li> <li><input type="checkbox"/> Make the change easy and unavoidable—build it into the work flow, automation, and structure</li> </ul>